STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF FISH AND GAME

FISH BULLETIN 153

THE CALIFORNIA MARINE FISH CATCH FOR 1969

by

LEO PINKAS

Marine Resources Region

1970

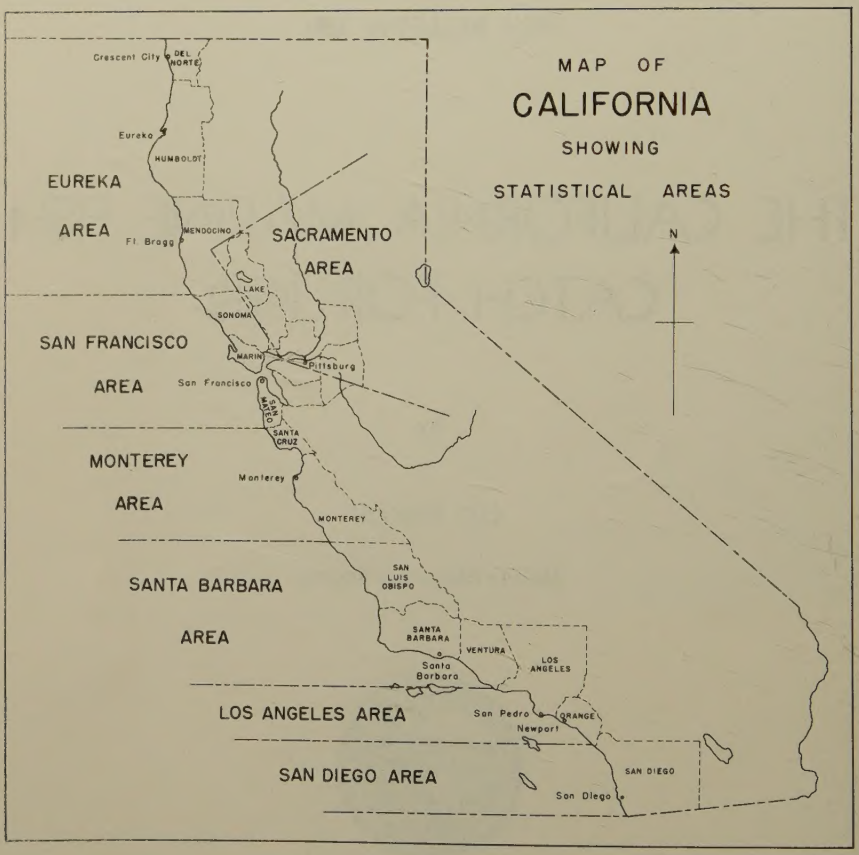
MAP OF
CALIFORNIA
SHOWING
STATISTICAL AREAS
N
Crescent City
DEL NORTE
Eureka
HUMBOLDT
EUREKA
AREA
Ft Bragg
MENDOCINO
SACRAMENTO
AREA
LAKE
SONOMA
SAN FRANCISCO
AREA
MARIN
Pittsburg
San Francisco
SAN MATEO
SANTA CRUZ
MONTEREY
AREA
Monterey
MONTEREY
SANTA BARBARA
AREA
SAN LUIS OBISPO
SANTA BARBARA
VENTURA
Santa Barbara
LOS ANGELES
LOS ANGELES AREA
San Pedro
ORANGE
Newport
SAN DIEGO AREA
SAN DIEGO
San Diego

FIGURE 1

TABLE OF CONTENTS

	Page
Foreword	5
Explanation of Tables	6
Common and Scientific Names of Fishes, Crustaceans and Mollusks in the 1969 Catch	9
Annual Landings and Shipments (Figure 2)	10
Annual Landings and Shipments, 1916 through 1969	11
Landings and Shipments of Leading Species Ranked by Pounds	11
Number of Licensed Commercial Fishermen	12
Number of Registered Fishing Boats by Length	12
Origin of Shipments	13
Origin of Commercial Fish Landings	14
Monthly Landings and Shipments—Statewide	16
Monthly Landings and Shipments—by Area	18
Value and Poundage, Annual Landings and Shipments by Areas	30
Value of Landings and Shipments by Ports and Areas	33
Partyboat Sport Catch, 1960–1969	43
Inshore Bait Landings, 1969	44
Live Bait Catch, 1965–1969	44
Appendix A—Species Composition of Salmon Landings	45

FOREWORD

Catch bulletins provide records of the amounts and values of various living marine resources taken by California's commercial fisheries, and summarize the catches made by the partyboat sportfishing industry. They also detail the small quantities of freshwater fish taken commercially in inland areas. These data provide the basic background for managing California's marine fishery resources. The published figures are of national and international significance, and are used by fisheries scientists, legislators, educators, members of the fishing industry, and others interested in the State's fisheries.

This report for 1969 is the 29th in the series of catch bulletins. The first, published in 1929, contained the records of the 1926 and 1927 commercial fish catches.

California's fishery statistics are based on a system whereby fish dealers, processors, and partyboat operators send duplicate copies of their landing records to the Department. The statistical system and methods used to collect the records were fully described in Fish Bulletin 86, which reported the catch for 1950. In the intervening years, methods and equipment have been modified as conditions warranted, but the basic principles have remained unchanged.

Credit for this publication belongs to the personnel of the Marine Fisheries Statistics Unit who process the many documents necessary for its publication. Special acknowledgment is given to the wardens along the coast and the clerks in the field offices whose efforts insure the completeness of the records. We appreciate as well the cooperation of the many wholesale fish dealers and canners.

Our sincere thanks to John E. Fitch for his counsel on some of the questionable elements in the list of common and scientific names of fishes, crustaceans and mollusks.

EXPLANATION OF TABLES

The tables in this bulletin summarize the statistics of the various fishery operations in California during 1969. Five types of activity are being reported this year: landings of commercial fishermen in California; imports of tuna from other states or foreign countries destined for processing in California; sport catches of the partyboat fleet; landings of inshore species used for bait; and catches of boats supplying live bait for sportfishing. In addition, Appendix A shows the species composition of the salmon catch for 1969.

The statistics presented in this publication do not encompass all of the fishing activities in the State since not all of these activities are reported. For example: sportfishing from private boats or from shore is not reported, nor is the importation of fish for use in a fresh state. Department biologists do sample some facets of the sportfishery, but since this is part of specific studies, most of the results are not reported here.

The Department annually publishes a circular which enumerates some of the fishery products produced from the catch. The 1969 figures are contained in circular No. 44, "Statistical Report of Fresh, Canned, Cured and Manufactured Fishery Products for 1969" (Carlisle, 1970).

SOURCE OF DATA

Data on each commercial landing, inshore bait delivery, and import are recorded on receipts by fish dealers or processors at the time of delivery. Copies of these documents are transmitted to the Department twice each month. For each transaction, the dealer is required to provide the weight of each species and the price paid to the fishermen. The date of the transaction, the fisherman's name, the fishing boat registration number, and intended use of the fish (canning, fresh, etc.) are also required. In addition, the specific area where the fish were caught and the type of gear used are usually reported.

Partyboat catch data are obtained from the logs completed by the boat operator. The log for each trip includes the number of each species taken, the number of anglers, the number of hours fished, and the specific area fished. The date, boat name, and boat registration number are also furnished. Copies of these records are sent to the Department monthly.

Operators of boats supplying live bait keep a voluntary daily log showing the number of sets, the species caught, the area fished, and the number of scoops of bait sold. Copies of these logs are furnished the Department monthly. These records represent almost all the live bait landings; nevertheless, the reported catch should be regarded as minimal.

Clerical personnel at field offices at Eureka, Monterey, Long Beach, and San Diego maintain contact with fish dealers and local Fish and Game Wardens to insure that the records are accurate and transmitted promptly. All data received by the Department are carefully edited to insure correctness and coded to facilitate processing. The data are then punched into cards and summarized with electric tabulating machines.

STATISTICAL AREAS

The State is divided into seven areas for the purpose of reporting fisheries statistics (Figure 1). Each statistical area is named for a major port within its boundaries. Sacramento area landing statistics are incorporated with San Francisco totals in the tables.

SPECIES

The common and scientific names of the species reported in 1969 are listed in Table 1. Some varieties are reported only collectively when, for economic or other reasons a specific separation is not practical. A further combination of species is made in preparing the tables.

The "Miscellaneous (Animal Food)" category consists of a variety of low value species caught by trawling. Since it is impractical for the dealers to report the many species separately, Department biologists periodically sample this catch to determine its species composition. Based on this sampling, the percentage and weight compositions of the 1969 animal-food category are as follows:

Species	*Percent*	*Pounds*
Sablefish	36.2	872,993
Arrowtooth flounder	19.5	470,259
Rockfish	11.6	279,744
Dover sole	9.7	233,923
Hake	8.5	204,984
Rex sole	5.6	135,049
English sole	4.9	118,168
Thirty-one other species	4.0	96,463
	100.0	2,411,583

Salmon catches reported in the tables are for all species combined. However, biologists from the Department's Anadromous Fisheries Branch sample the commercial and sport salmon fisheries to determine the species composition of the catches and to obtain estimates of the unreported catch from skiffs. The sampling methods and results for 1952 through 1965 were detailed by Jensen and Swartzell (1967); since 1966 results have been presented annually in the catch bulletin. Appendix A details the salmon catch for 1969.

CONDITION

Most fish and shellfish are landed in a round condition; however, some species, such as salmon and swordfish, are usually eviscerated or cleaned before being brought ashore. The condition of fish landed or shipped into the State cannot always be determined, so the tables summarize the weights as reported to the Department without regard to condition.

Since 1963, oyster landings have been reported as packed weight rather than weight in the shell. The packed weight is estimated to be 15.5 percent of the live weight for Pacific oysters and 10.9 percent for eastern oysters.

Landings reported in measurements other than weight are equated to pounds using conversion factors determined by periodic sampling. The factors used in 1969 were:

Abalone, red	50	pounds per dozen
Abalone, pink	25	pounds per dozen
Abalone, white	25	pounds per dozen
Abalone, green	35	pounds per dozen
Clam, Washington	7	pounds per dozen
Crab, market	2	pounds each
Live bait	12.5	pounds per scoop

VALUE

Value is computed from prices paid to the fishermen. The area value figures are ascertained by summing the value of all the individual landings in that area. The value for an individual port within an area is calculated from the weights of each species landed at that port and the average price paid for the species in that area. When the price paid for an individual landing is not specified, the average price paid for the species in the area is used.

INSHORE BAIT

The inshore bait, fishery takes several kinds of fish and invertebrates from bays, rivers, and intertidal regions for sale as bait. Records of this fishery have been published as a separate summary in the Catch Bulletin since 1963. Conversion factors used for inshore bait for 1969 were as follows:

Crab, sand	.041	pound per dozen
	4.5	pounds per gallon
Crab, shore	.013	pound per dozen
Mudsucker	.465	pound per dozen
Mussel	80	pounds per sack
Sculpin, staghorn	.465	pound per dozen
Shrimp, ghost	.082	pound per dozen

REFERENCES

Carlisle, John G. 1970. Statistical report of fresh canned, cured and manufactured fishery products for 1969. Calif. Fish and Game, Circular, (44) : 1–15.

Jensen, Paul T., and Phillip G. Swartzell. 1967. California salmon landings 1952 through 1965, Calif. Dept. Fish and Game, Fish Bull., (135) : 43–57.

TABLE 1

Common and Scientific Names of Fishes, Crustaceans, and Mollusks in the 1969 Catch

Common name	Scientific name
FISHES	
Anchovy	*Engraulis mordax*
Barracuda, California	*Sphyraena argentea*
Bass, rock	
Kelp bass	*Paralabrax clathratus*
Sand bass	*Paralabrax nebulifer*
Spotted sand bass	*Paralabrax maculatofasciatus*
Blacksmith	*Chromis punctipinnis*
Bonito, Pacific	*Sarda chiliensis*
Cabezon	*Scorpaenichthys marmoratus*
Cabrilla, spotted	*Epinephelus analogus*
Carp	*Cyprinus carpio*
Croaker	
White	*Genyonemus lineatus*
Queenfish	*Seriphus politus*
Dolphinfish	*Coryphaena hippurus*
Eel	
California moray	*Gymnothorax mordax*
Wolf	*Anarrichthys ocellatus*
Flounder	
Arrowtooth	*Atheresthes stomias*
Starry	*Platichthys stellatus*
Miscellaneous	Various species
Flyingfish	*Cypselurus* spp.
Greenling, kelp	*Hexagrammos decagrammus*
Grouper	*Mycteroperca* spp.
Hake, Pacific	*Merluccius productus*
Halfmoon	*Medialuna californiensis*
Halibut	
California	*Paralichthys californicus*
Pacific	*Hippoglossus stenolepis*
Hardhead	
Sacramento blackfish	*Orthodon microlepidotus*
Hardhead	*Mylopharodon conocephalus*
Herring, Pacific	*Clupea pallasi*
Hitch	*Lavinia exilicauda*
Lingcod	*Ophiodon elongatus*
Mackerel	
Jack	*Trachurus symmetricus*
Pacific	*Scomber japonicus*
Mudsucker, longjaw	*Gillichthys mirabilis*
Opaleye	*Girella nigricans*
Perch	Members of family Embiotocidae
Pompano, Pacific	*Peprilus simillimus*
Rockfish	Various species of *Sebastes* and *Sebastolobus*
Sablefish	*Anoplopoma fimbria*
Salmon	
King	*Oncorhynchus tshawytscha*
Pink	*Oncorhynchus gorbuscha*
Silver	*Oncorhynchus kisutch*
Sanddab	*Citharichthys sordidus*
Sardine	*Sardinops caeruleus*
Sargo	*Anisotremus davidsoni*
Sculpin	*Scorpaena guttata*
Sculpin, Pacific staghorn	*Leptocottus armatus*
Sea bass, giant	*Stereolepis gigas*
Seabass, white	*Cynoscion nobilis*
Shark	
Basking	*Cetorhinus maximus*
Blue	*Prionace glauca*
Bonito	*Isurus oxyrinchus*
Leopard	*Triakis semifasciata*
Pacific angel	*Squatina californica*
Soupfin	*Galeorhinus zyopterus*
Spiny dogfish	*Squalus acanthias*
Thresher	*Alopias vulpinus*
Miscellaneous	Various species
Sheephead, California	*Pimelometopon pulchrum*
Skate	
Bat ray	*Myliobatis californica*
Big skate	*Raja binoculata*
California skate	*Raja inornata*
Longnose skate	*Raja rhina*
Shovelnose guitarfish	*Rhinobatos productus*
Miscellaneous	Various species
Smelt	
Jacksmelt	*Atherinopsis californiensis*
Night smelt	*Spirinchus starksi*
Surf smelt	*Hypomesus pretiosus*
Smelt, whitebait	*Allosmerus elongatus* *Spirinchus starksi* Young of several others
Sole	
Dover	*Microstomus pacificus*
English	*Parophrys vetulus*
Petrale	*Eopsetta jordani*
Rex	*Glyptocephalus zachirus*
Rock	*Lepidopsetta bilineata*
Sand	*Psettichthys melanostictus*
Scalyfin	*Isopsetta isolepis*
Miscellaneous	Various species
Swordfish	*Xiphias gladius*
Tuna	
Albacore	*Thunnus alalunga*
Bigeye	*Thunnus obesus*
Bluefin	*Thunnus thynnus*
Skipjack	*Katsuwonus pelamis*
Yellowfin	*Thunnus albacares*
Turbot	
Curlfin	*Pleuronichthys decurrens*
Diamond	*Hypsopsetta guttulata*
Hornyhead	*Pleuronichthys verticalis*
Miscellaneous	Various species
Wahoo	*Acanthocybium solanderi*
Whitefish, ocean	*Caulolatilus princeps*
Yellowtail, California	*Seriola dorsalis*
CRUSTACEANS	
Crab	
Market	*Cancer magister*
Rock	*Cancer productus* *Cancer antennarius* *Cancer anthonyi*
Sand	*Emerita analoga*
Shore	*Hemigrapsus oregonensis* *Pachygrapsus crassipes*
Spider	*Loxorhynchus* sp.
Crayfish	*Astacus trowbridgei*
Lobster, spiny	*Panulirus interruptus*
Prawn	
Ridgeback	*Eusicyonia ingentis*
Spot	*Pandalus platyceros*
Shrimp	
Bay	*Crago franciscorum* *Crago nigricauda*
Ghost	*Callianassa californicus*
Ocean	*Pandalus jordani*
Red	*Hippolysmata californica*
MOLLUSKS	
Abalone	
Black	*Haliotis cracherodii*
Green	*Haliotis fulgens*
Pink	*Haliotis corrugata*
Red	*Haliotis rufescens*
Threaded	*Haliotis assimilis*
White	*Haliotis sorenseni*
Clam	
Freshwater	*Corbicula fluminea*
Jackknife	*Tagelus californianus*
Littleneck	*Paphia staminea*
Purple	*Sanguinolaria nuttalli*
Washington	*Saxidomus nuttalli*
Mussel	
Bay	*Mytilus edulis*
Rock	*Mytilus californianus*
Octopus	*Octopus* spp.
Oyster	
Eastern	*Crassostrea virginica*
European flat	*Ostrea edulis*
Giant Pacific	*Crassostrea gigas*
Squid	*Loligo opalescens*

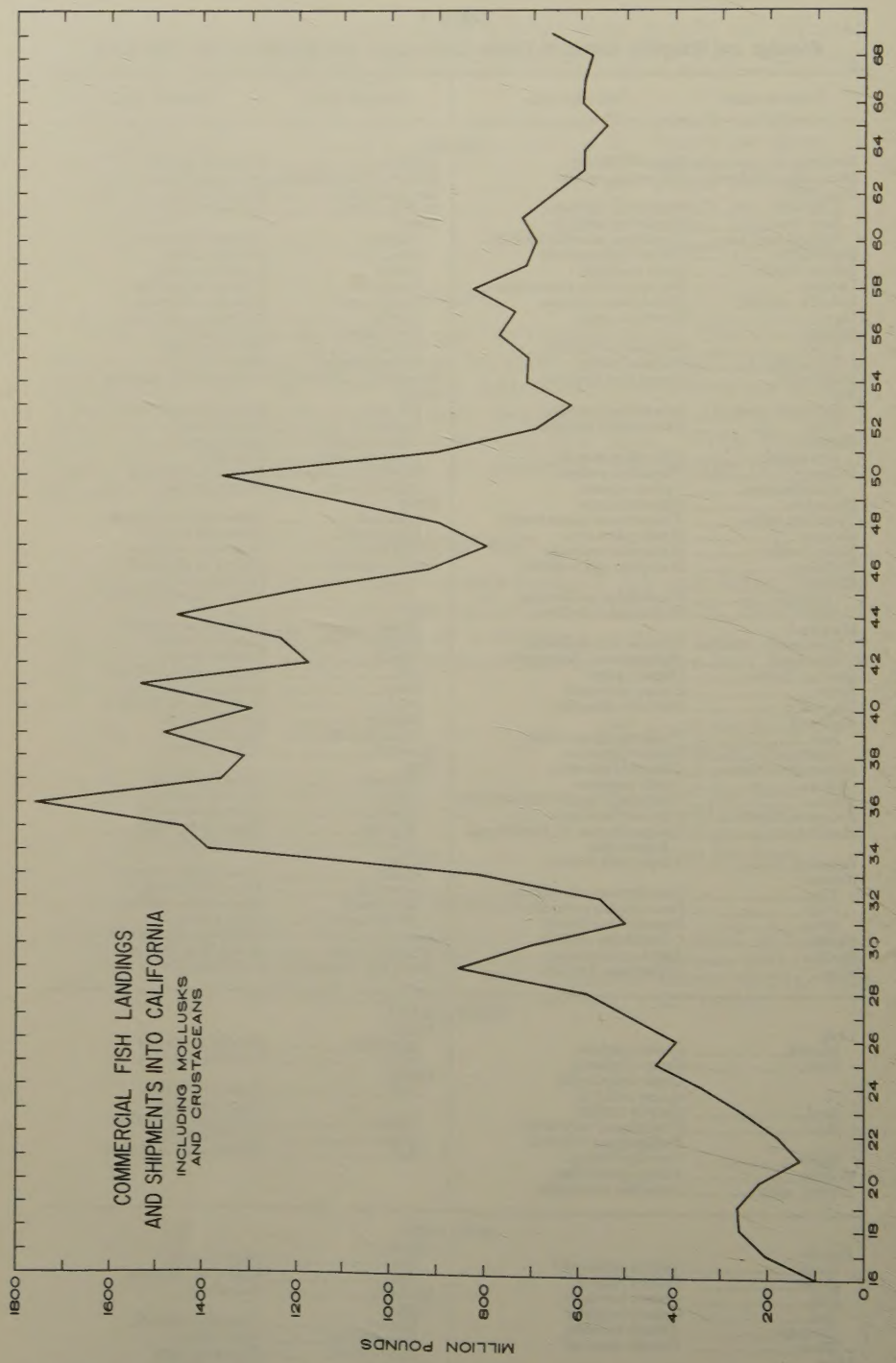

FIGURE 2. Total annual landings and shipments into California (see Table 2). Sardine deliveries to reduction ships, 1930–38, are included. Since 1965, tunas are the only species included in shipments.

TABLE 2

Total Annual Landings and Shipments Into California of Commercial Fish, Mollusks, and Crustaceans; Includes Sardine Deliveries to Reduction Ships During 1930 Through 1938

Year	Thousands of pounds	Year	Thousands of pounds
1916	95,003	1941	1,528,892
1917	209,877	1942	1,173,414
1918	261,134	1943	1,234,049
1919	266,270	1944	1,459,456
1920	222,004	1945	1,216,501
1921	135,348	1946	919,822
1922	182,343	1947	795,499
1923	253,875	1948	900,467
1924	340,446	1949	1,135,339
1925	437,502	1950	1,366,676
1926	394,964	1951	904,114
1927	487,166	1952	694,996
1928	583,527	1953	618,919
1929	856,854	1954	713,410
1930	702,189	1955	710,713
1931	502,390	1956	772,551
1932	556,139	1957	738,550
1933	821,805	1958	832,919
1934	1,390,798	1959	713,423
1935	1,448,017	1960	694,663
1936	1,764,900	1961	725,253
1937	1,362,984	1962	663,107
1938	1,310,596	1963	592,899
1939	1,486,535	1964	591,131
1940	1,297,518	1965*	544,480
		1966	591,533
		1967	589,028
		1968	567,214
		1969	672,793

* Beginning in 1965 only tuna shipments are recorded.

TABLE 3

Landings and Shipments of Leading Species Ranked by Pounds *

1968				1969			
Species	Rank	Thousands of pounds	Thousands of dollars	Species	Rank	Thousands of pounds	Thousands of dollars
Yellowfin tuna	1	212,238	$36,438	Yellowfin tuna	1	240,747	$40,536
Albacore tuna	2	76,100	18,237	Anchovy	2	135,278	1,353
Skipjack tuna	3	60,674	7,959	Albacore tuna	3	71,055	18,021
Jack mackerel	4	55,668	2,122	Jack mackerel	4	51,921	1,967
Anchovy	5	31,076	284	Skipjack tuna	5	48,680	6,558
Squid	6	24,933	553	Squid	6	20,779	555
Market crab	7	16,016	3,535	Pacific bonito	7	17,202	805
Pacific bonito	8	14,922	620	Bluefin tuna	8	15,607	2,462
Bluefin tuna	9	13,016	1,968	Dover sole	9	12,919	925
Rockfish	10	9,444	668	Rockfish	10	9,227	694
Dover sole	11	8,536	578	Market crab	11	7,939	2,295
Salmon	12	6,952	4,014	Salmon	12	6,151	3,843
English sole	13	5,811	501	Sablefish	13	4,157	310
Abalone	14	4,475	1,124	English sole	14	3,804	334
Sablefish	15	3,219	229	Abalone	15	3,658	1,161
Pacific mackerel	16	3,133	168	Ocean shrimp	16	2,948	413
Petrale sole	17	2,947	389	Petrale sole	17	2,867	414
Miscellaneous (animal food)	18	2,590	52	Miscellaneous (animal food)	18	2,412	48
Ocean shrimp	19	2,275	250	Pacific mackerel	19	2,357	122
Rex sole	20	1,931	163	Rex sole	20	2,259	218
All others		11,258	1,935	All others		10,826	2,402
Totals		567,214	$81,787	Totals		672,793	$85,436

* Only the tunas are included in the shipments.

TABLE 4

Number of Licensed Commercial Fishermen

Area of residence	License year*	
	1968–69	1969–70
Eureka	2,101	1,977
Sacramento	477	508
San Francisco	1,633	1,852
Monterey	743	910
Santa Barbara	915	911
Los Angeles	1,969	1,912
San Diego	1,613	1,452
Alaska, Washington and Oregon fishermen licensed in California	505	414
Mexican nationals licensed in California	6	12
Other	42	41
Totals	**10,004**	**9,989**

* April 1 to March 31.

TABLE 5

Number of Registered Fishing Boats by Length

License year*	Up to 24 feet	25 to 39 feet	40 to 64 feet	65 to 84 feet	85 to 99 feet	100 feet and over	Total
1968–69	1,677	1,829	1,080	137	25	106	4,854†
1969–70	1,703	1,828	1,050	140	20	107	4,848‡

* April 1 to March 31.
† The owners of 492 boats were issued fishing party licenses in 1968–69.
‡ The owners of 479 boats were issued fishing party licenses in 1969–70.

TABLE 6

Origin of Shipments Received for Processing in California During 1969 *

Shipped from: Species	Pounds shipped to each area		
	Los Angeles	San Diego	Total pounds
Oregon, Washington, Canada and Alaska:			
Tuna, albacore	12,564,798	----	12,564,798
Mexico and Central America:			
Tuna, bluefin	372,589	----	372,589
Tuna, skipjack	1,042,597	----	1,042,597
Tuna, yellowfin	6,341,710	----	6,341,710
South America:			
Tuna, albacore	3,277,060	----	3,277,060
Tuna, skipjack	1,484,984	----	1,484,984
Tuna, yellowfin	228,843	----	228,843
Japan:			
Tuna, albacore	16,591,705	1,556,054	18,147,759
Tuna, skipjack	20,911	----	20,911
Tuna, yellowfin	18,399,713	969,420	19,369,133
China (Formosa):			
Tuna, albacore	238,851	14,320	253,171
Tuna, yellowfin	942,034	11,250	953,284
Malaya:			
Tuna, albacore	3,154,439	401,430	3,555,869
Tuna, yellowfin	5,205,430	----	5,205,430
Philippines:			
Tuna, bigeye	1,695	----	1,695
Tuna, yellowfin	980,053	----	980,053
South Pacific Islands:			
Tuna, albacore	8,071,028	1,456,686	9,527,714
Tuna, skipjack	217,104	----	217,104
Tuna, yellowfin	3,007,297	----	3,007,297
Africa:			
Tuna, Albacore	7,906,430	1,100,230	9,006,660
Tuna, yellowfin	498,823	----	498,823
Total pounds	**90,548,094**	**5,509,390**	**96,057,484**

* Beginning in 1965 only tuna shipments are recorded.

TABLE 7

Origin of Commercial Fish Landings and Volume of Shipments Into California During 1969

Species	Landings of catches from				Tuna shipments*	Grand total
	California waters	Waters north of State	Waters south of State	Total pounds		
Fish:						
Anchovy	135,277,718	----	----	135,277,718	----	135,277,718
Barracuda, California	70,833	----	3,760	74,593	----	74,593
Blackfish	258,272	----	----	258,272	----	258,272
Blacksmith	246,517	----	----	246,517	----	246,517
Bonito, Pacific	13,174,505	----	4,027,342	17,201,847	----	17,201,847
Cabezon	25,837	----	----	25,837	----	25,837
Cabrilla, spotted	----	----	5,755	5,755	----	5,755
Carp	298,142	----	----	298,142	----	298,142
Croaker, white	525,514	----	----	525,514	----	525,514
Flounder	369,830	5,010	----	374,840	----	374,840
Flounder, arrowtooth	9,553	433	----	9,986	----	9,986
Flyingfish	99,758	----	----	99,758	----	99,758
Greenling, kelp	420	----	----	420	----	420
Grouper	----	----	255,111	255,111	----	255,111
Hake, Pacific	27,047	----	----	27,047	----	27,047
Halfmoon	26,813	----	215	27,028	----	27,028
Halibut, California	272,331	----	1,946	274,277	----	274,277
Hardhead	10,051	----	----	10,051	----	10,051
Herring, Pacific	170,532	----	----	170,532	----	170,532
Lingcod	1,022,394	91,114	----	1,113,508	----	1,113,508
Mackerel, jack	51,921,162	----	----	51,921,162	----	51,921,162
Mackerel, Pacific	2,357,194	----	----	2,357,194	----	2,357,194
Opaleye	15,849	----	80	15,929	----	15,929
Perch	154,899	----	1,629	156,528	----	156,528
Pompano, Pacific	216,758	----	200	216,958	----	216,958
Rockfish	8,802,529	268,418	156,504	9,227,451	----	9,227,451
Sablefish	3,975,704	181,142	----	4,156,846	----	4,156,846
Salmon	6,150,589	317	----	6,150,906	----	6,150,906
Sanddab	690,167	6,315	----	696,482	----	696,482
Sardine	105,273	----	----	105,273	----	105,273
Sculpin	74,206	----	41,265	115,471	----	115,471
Sea bass, giant	7,684	----	147,077	154,761	----	154,761
Seabass, white	250,906	----	847,802	1,098,708	----	1,098,708
Shark	452,271	32	25,932	478,235	----	478,235
Sheephead, California	12,450	----	835	13,285	----	13,285
Skate	106,068	----	----	106,068	----	106,068
Smelt	413,461	----	----	413,461	----	413,461
Smelt, whitebait	161,449	----	----	161,449	----	161,449
Sole, Dover	11,103,154	1,815,828	----	12,918,982	----	12,918,982
Sole, English	3,701,026	103,021	----	3,804,047	----	3,804,047
Sole, petrale	2,728,932	138,132	----	2,867,064	----	2,867,064
Sole, rex	2,142,332	116,833	----	2,259,165	----	2,259,165
Sole, sand	202,517	1,247	----	203,764	----	203,764
Sole, miscellaneous	17,022	----	78	17,100	----	17,100
Swordfish	1,024,518	----	7,065	1,031,583	----	1,031,583
Tuna, albacore	11,162,742	3,026,404	533,249	14,722,395	56,333,031	71,055,426
Tuna, bigeye	----	----	229,619	229,619	1,695	231,314
Tuna, bluefin	798,058	----	14,436,672	15,234,730	372,589	15,607,319
Tuna, skipjack	74,160	----	45,840,325	45,914,485	2,765,596	48,680 081
Tuna, yellowfin	717	----	204,161,220	204,161,937	36,584,573	240,746,510
Turbot	25,033	----	----	25,033	----	25,033
Whitefish, ocean	2,413	----	2,077	4,490	----	4,490
Yellowtail, California	11,744	----	222,411	234,155	----	234,155
Miscellaneous	2,166	----	10	2,176	----	2,176
Miscellaneous (animal food)	2,072,917	338,666	----	2,411,583	----	2,411,583

TABLE 7—Continued

Origin of Commercial Fish Landings and Volume of Shipments Into California During 1969

Species	Landings of catches from				Tuna shipments*	Grand total
	California waters	Waters north of State	Waters south of State	Total pounds		
Crustacean:						
Crab, market	7,938,728	268	----	7,938,996	----	7,938,996
Crab, rock	504,076	----	----	504,076	----	504,076
Crayfish	550	----	----	550	----	550
Lobster, spiny	309,472	----	----	309,472	----	309,472
Prawn, spot	5,073	----	----	5,073	----	5,073
Shrimp, bay	8,041	----	----	8,041	----	8,041
Shrimp, ocean	2,947,563	----	----	2,947,563	----	2,947,563
Miscellaneous crustacean	36	----	----	36	----	36
Mollusk:						
Abalone	3,658,078	----	----	3,658,078	----	3,658,078
Octopus	4,443	219	----	4,662	----	4,662
Oyster, eastern	16,952	----	----	16,952	----	16,952
Oyster, giant Pacific	696,093	----	----	696,093	----	696,093
Squid	20,779,382	----	----	20,779,382	----	20,779,382
Miscellaneous mollusk	1,655	----	----	1,655	----	1,655
Total pounds	**299,694,279**	**6,093,399**	**270,948,179**	**576,735,857**	**96,057,484**	**672,793,341**

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 8
Monthly Landings and Shipments Into California During 1969

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS:													
Fish:													
Anchovy	2,873,470	763,158	3,626,558	16,201,749	8,348,383	73,666	138,480	2,193,487	5,353,561	30,841,865	30,702,740	34,160,601	135,277,718
Barracuda, California	1,007	452	3	4,597	27,814	22,330	6,818	812	198	2,155	8,367	40	74,593
Blackfish	----	84,567	48,450	2	----	----	----	----	3,150	28,400	21,050	72,653	258,272
Blacksmith	----	----	10,275	4,625	40,321	150,314	40,466	----	----	----	516	----	246,517
Bonito, Pacific	1,233,353	275,018	641,010	429,435	815,941	1,498,245	2,987,439	5,218,052	1,346,580	1,326,556	989,628	440,590	17,201,847
Cabezon	2,659	598	1,296	131	35	----	339	401	2,883	5,972	8,364	3,159	25,837
Cabrilla, spotted	----	----	----	----	----	----	1,690	3,898	----	----	----	167	5,755
Carp	120	170,420	23,927	550	450	----	----	----	10,700	24,800	15,425	51,750	298,142
Croaker, white	73,703	76,190	68,965	53,351	26,275	26,922	10,946	8,368	15,971	42,192	45,924	76,707	525,514
Flounder	35,558	53,008	53,331	12,766	9,692	13,525	22,048	61,695	28,763	27,927	45,090	11,427	374,840
Flounder, arrowtooth	----	750	433	----	1,600	1,130	5,093	590	390	----	----	----	9,986
Flyingfish	----	----	----	----	36,866	25,490	34,810	2,592	----	----	----	----	99,758
Greenling, kelp	130	194	----	25	----	----	----	44	6	21	----	----	420
Grouper	17,745	50,107	----	----	----	----	310	49,687	15,445	33,485	26,180	62,152	255,111
Hake, Pacific	----	----	----	----	----	45	18,682	20	----	8,169	106	25	27,047
Halfmoon	1,852	165	1,605	3,976	1,856	2,229	936	2,899	2,246	3,620	2,482	3,162	27,028
Halibut, California	22,584	28,647	39,276	19,971	14,510	15,305	47,726	28,671	13,615	12,793	16,050	15,129	274,277
Hardhead	3,350	1,608	2,985	1,010	1,098	----	----	----	----	----	----	----	10,051
Herring, Pacific	18,212	9,120	----	11,705	82,760	39,690	9,045	----	----	----	----	----	170,532
Lingcod	21,920	21,965	47,273	35,171	95,847	168,497	123,114	175,108	175,744	117,852	109,035	21,982	1,113,508
Mackerel, jack	3,791,843	4,018,857	5,336,600	4,268,747	4,800,700	3,949,216	6,584,404	3,378,158	5,675,110	6,952,074	1,696,398	1,469,055	51,921,162
Mackerel, Pacific	228,549	37,316	192,148	132,499	305,391	350,454	166,420	266,855	262,959	86,808	248,066	79,729	2,357,194
Opaleye	105	----	190	3,463	4,803	659	97	2,204	596	1,942	782	1,088	15,929
Perch	11,116	6,222	25,317	33,129	5,980	4,205	9,479	12,540	13,943	11,571	15,801	7,225	156,528
Pompano, Pacific	4,711	11,730	39,566	43,309	16,265	25,882	15,610	22,573	19,582	11,971	3,721	2,038	216,958
Rockfish	486,072	233,759	1,001,815	805,657	894,027	1,195,731	877,285	616,789	914,690	853,696	866,699	481,231	9,227,451
Sablefish	355,732	177,245	507,896	335,568	233,752	237,403	172,083	148,969	410,237	678,935	554,397	344,629	4,156,846
Salmon	----	----	----	552,355	1,314,475	1,572,368	1,845,000	555,392	311,306	10	----	----	6,150,906
Sanddab	39,663	21,407	69,814	21,901	44,396	66,113	84,606	97,556	115,719	61,094	50,006	24,207	696,482
Sardine	2,610	685	10,373	3,329	12,436	31,414	15,168	4,255	5,181	3,236	6,165	10,421	105,273
Sculpin	10,651	2,414	1,726	5,952	9,681	22,200	19,570	24,466	6,119	3,652	7,973	1,067	115,471
Sea bass, giant	14,344	22,881	11,553	12,017	15,056	2,526	4,119	8,405	14,821	17,298	16,006	15,735	154,761
Seabass, white	61,902	95,040	198,019	142,461	91,826	13,184	33,621	93,408	122,184	128,671	67,658	50,734	1,098,708
Shark	21,967	8,687	17,589	30,070	47,056	61,099	69,881	54,720	27,494	44,942	47,900	46,830	478,235
Sheephead, California	936	321	489	1,105	1,527	1,433	3,955	989	140	610	1,057	723	13,285
Skate	8,178	11,590	15,720	12,485	12,567	10,701	8,804	6,234	4,330	8,071	4,568	2,820	106,068
Smelt	14,116	14,593	10,789	22,816	43,301	25,639	19,860	45,756	79,140	66,600	53,071	17,780	413,461
Smelt, whitebait	125	3,187	25,365	48,364	39,754	35,099	7,278	1,505	397	125	125	125	161,449
Sole, Dover	334,947	135,868	781,622	1,348,521	838,194	1,408,283	1,212,667	1,499,185	1,957,303	1,807,077	974,852	620,463	12,918,982
Sole, English	357,082	202,849	432,257	348,014	320,977	295,869	219,196	378,300	431,563	383,421	264,265	170,254	3,804,047

Sole, petrale	426,355	110,585	310,559	161,486	205,762	244,489	180,811	296,332	274,021	196,485	239,753	220,426	2,867,064
Sole, rex	243,452	80,214	318,277	217,419	143,755	177,157	116,689	204,012	292,650	230,824	143,785	90,931	2,259,165
Sole, sand	18,482	17,710	20,885	18,450	5,955	17,229	22,585	33,649	20,464	13,213	8,687	6,455	203 764
Sole, miscellaneous	1,613	1,132	4,334	881	1,002	209	532	527	1,522	2,085	2,245	1,018	17,100
Swordfish	----	4,594	----	854	----	26,236	137,047	258,584	312,326	235,076	55,525	1,341	1,031,583
Tuna, albacore	----	----	----	----	----	----	260,796	2,158,278	4,646,736	5,736,870	1,227,750	691,965	14,722,395
Tuna, bigeye	35,011	72,400	99,445	----	----	----	----	13,483	----	----	9,280	----	229,619
Tuna, bluefin	22,365	----	----	468,475	169,511	1,955,046	4,084,103	4,100,400	3,565,116	652,868	108,403	108,443	15,234,730
Tuna, skipjack	1,548,084	1,085,774	3,612,445	7,173,541	4,622,104	2,753,514	5,718,288	4,246,645	1,784,507	4,820,521	7,158,947	1,390,115	45,914,485
Tuna, yellowfin	4,594,761	35,191,656	30,236,558	38,061,103	35,378,118	17,371,467	6,145,770	2,160,691	8,241,143	8,568,654	6,448,444	11,763,572	204,161,937
Turbot	2,188	1,148	2,272	3,123	2,151	1,243	1,755	6,170	1,356	2,251	262	1,114	25,033
Whitefish, ocean	290	1,199	1,378	----	100	----	224	501	319	328	151	----	4,490
Yellowtail, California	33,537	33,465	10,873	4,402	10,946	7,283	11,803	7,480	30,403	31,692	30,509	21,762	234,155
Miscellaneous	----	----	----	24	30	38	----	227	563	436	795	63	2,176
Miscellaneous (animal food)	63,787	22,917	114,036	240,816	185,129	392,687	263,155	241,060	289,988	413,943	126,641	57,430	2,411,583
Crustacean:													
Crab, market	3,991,802	955,351	822,595	324,378	616,721	120,279	13,524	----	----	----	760,578	333,768	7,938,996
Crab, rock	42,769	46,580	39,345	20,278	28,330	36,845	40,625	48,451	43,784	49,342	64,057	43,670	504,076
Crayfish	----	----	----	----	----	----	----	375	175	----	----	----	550
Lobster, spiny	48,179	32,266	15,900	----	----	----	----	----	----	85,520	66,140	61,467	309,472
Prawn, spot	1,584	619	92	----	----	----	----	----	----	----	825	1,953	5,073
Shrimp, bay	----	----	----	----	----	----	6,645	331	1,065	----	----	----	8,041
Shrimp, ocean	----	----	----	----	1,031,461	1,260,317	600,540	55,245	----	----	----	----	2,947,563
Miscellaneous crustacean	----	----	----	----	----	----	----	----	----	----	----	36	36
Mollusk:													
Abalone	376,939	----	202,201	315,237	383,292	420,339	414,269	329,661	365,294	305,939	339,519	205,388	3,658,078
Octopus	129	116	606	177	249	756	471	537	387	254	468	512	4,662
Oyster, eastern	1,334	1,762	911	2,115	714	1,161	1,487	1,324	1,332	1,100	1,873	1,839	16,952
Oyster, giant Pacific	47,309	34,841	47,870	58,349	53,255	40,658	33,091	26,649	36,759	90,772	105,353	121,187	696,093
Squid	1,776,693	1,217,580	940,690	669,470	3,278,289	4,410,630	3,061,600	1,849,010	51,630	70,390	1,147,340	2,306,060	20,779,382
Miscellaneous mollusk	30	41	30	43	----	----	----	----	----	12	786	713	1,655
Total pounds	23,327,005	45,452,562	50,045,537	72,691,447	64,672,486	40,584,459	35,932,855	31,004,205	37,303,606	65,106,186	54,918,583	55,696,926	576,735,857
SHIPMENTS:*													
Fish:													
Tuna, albacore	1,541,494	1,166,008	3,480,636	1,107,002	2,687,176	4,080,449	5,415,908	13,380,219	7,245,065	5,982,603	8,587,156	1,659,315	56,333,031
Tuna, bigeye	1,695	----	----	----	----	----	----	----	----	----	----	----	1,695
Tuna, bluefin	----	----	----	----	----	58,136	314,453	----	----	----	----	----	372,589
Tuna, skipjack	1,759,421	206,985	----	132,760	84,964	4,220	----	9,977	504,914	62,355	----	----	2,765,596
Tuna, yellowfin	1,571,970	1,694,088	2,927,077	2,787,098	5,145,503	7,090,314	4,262,558	3,409,445	1,531,182	2,083,725	2,266,084	1,815,529	36,584,573
Total pounds	4,874,580	3,067,081	6,407,713	4,026,860	7,917,643	11,233,119	9,992,919	16,799,641	9,281,161	8,128,683	10,853,240	3,474,844	96,057,484
Grand total	**28,201,585**	**48,519,643**	**56,453,250**	**76,718,307**	**72,590,129**	**51,817,578**	**45,925,774**	**47,803,846**	**46,584,767**	**73,234,869**	**65,771,823**	**59,171,770**	**672,793,341**

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 9

Monthly Landings of Commercial Fishing Boats in the Eureka Area During 1969

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy	----	----	----	----	----	----	----	2,000	----	----	----	----	2,000
Bonito, Pacific	----	----	----	----	----	----	----	----	1,585	----	----	----	1,585
Cabezon	----	----	10	34	----	----	----	134	2	----	----	4	184
Flounder	7,147	275	12,645	659	1,764	9,973	8,734	34,923	10,625	10,845	35,352	6,075	139,017
Flounder, arrowtooth	----	750	----	----	1,000	----	2,523	----	----	----	----	----	4,273
Greenling, kelp	----	----	----	----	----	----	----	44	6	1	----	----	51
Halibut, California	----	----	----	----	----	----	58	----	----	----	----	----	58
Lingcod	8,732	13,993	26,996	22,326	50,948	98,195	92,006	155,044	118,503	95,470	75,205	8,710	766,128
Perch	4,879	2,685	7,706	6,515	----	----	2,594	4,093	6,176	2,331	2,023	713	39,715
Rockfish	133,343	66,908	279,302	179,670	224,476	372,855	260,082	297,144	283,082	396,344	281,422	177,862	2,952,490
Sablefish	220,202	77,086	214,476	257,984	155,833	122,921	86,464	85,066	205,124	406,312	288,647	127,309	2,247,424
Salmon	----	----	----	149,813	598,058	864,852	1,194,155	355,226	197,149	----	----	----	3,359,253
Sanddab	11,766	1,287	29,792	9,567	9,455	40,228	39,974	77,391	73,320	28,907	21,477	11,978	355,142
Shark	713	112	23	----	----	90	----	15	81	424	1,220	2,434	5,112
Skate	----	----	----	4,975	4,722	4,605	2,964	2	10	20	----	----	17,298
Smelt	----	72	1,095	4,681	7,411	5,380	12,475	41,503	69,594	6,048	----	----	148,259
Smelt, whitebait	----	2,807	24,927	44,836	39,284	33,009	6,933	1,380	272	----	----	----	153,448
Sole, Dover	334,947	131,438	351,345	970,730	612,638	1,128,708	1,054,059	1,396,865	1,600,130	1,574,170	760,121	543,075	10,458,226
Sole, English	82,126	66,884	170,710	187,874	120,096	174,827	80,126	256,977	232,922	204,213	105,332	48,533	1,730,620
Sole, petrale	407,964	98,644	146,069	74,995	65,379	124,475	80,975	196,143	144,792	132,960	145,237	124,030	1,741,663
Sole, rex	219,328	65,484	209,135	166,533	95,368	152,632	99,833	186,282	245,146	185,020	91,902	50,537	1,767,200
Sole, sand	----	----	675	----	----	6,739	1,340	18,464	8,138	2,796	2,327	1,445	41,924
Sole, Miscellaneous	----	----	----	----	----	25	5	38	33	----	----	----	101
Tuna, albacore	----	----	----	----	----	----	10,672	1,654,893	2,691,319	322,209	6,567	562	4,686,222
Turbot	----	----	50	30	----	143	----	415	61	145	102	164	1,110
Miscellaneous	----	----	----	----	----	19	----	223	10	110	235	----	597
Miscellaneous (animal food)	29,247	7,296	34,731	89,983	101,145	303,202	176,945	210,993	240,294	301,200	82,924	39,405	1,617,365
Crustacean:													
Crab, market	3,884,271	896,653	804,515	318,776	611,061	118,853	13,524	----	----	----	----	14,048	6,661,701
Crab, rock	110	----	----	820	740	1,260	260	810	240	----	----	200	4,440
Shrimp, ocean	----	----	----	----	1,031,461	1,260,317	600,540	55,245	----	----	----	----	2,947,563

Mollusk:													
Octopus	----	66	216	12	114	356	42	414	352	227	129	----	1,928
Oyster, giant Pacific	16,876	8,708	19,888	34,764	30,284	15,753	8,820	6,128	13,238	59,265	60,536	76,497	350,757
Total pounds	5,361,651	1,441,148	2,334,306	2,525,577	3,761,237	4,839,417	3,836,103	5,037,855	6,142,204	3,729,017	1,960,758	1,233,581	42,202,854
Waters north of state:													
Fish:													
Flounder	----	----	648	1,700	301	1,106	346	----	574	----	335	----	5,010
Flounder, arrowtooth	----	----	433	----	----	----	----	----	----	----	----	----	433
Lingcod	----	----	2,011	4,598	7,024	19,554	10,551	9,775	35,589	705	1,307	----	91,114
Rockfish	----	----	51,812	26,283	20,798	34,670	11,107	16,072	59,451	18,425	21,736	8,064	268,418
Sablefish	----	----	62,610	28,697	7,020	12,035	7,521	2,633	33,671	12,493	9,234	5,228	181,142
Salmon	----	----	----	----	----	288	----	29	----	----	----	----	317
Sanddab	----	----	1,403	179	331	686	1,952	440	1,274	----	50	----	6,315
Shark	----	----	----	----	----	----	----	----	----	----	32	----	32
Sole, Dover	----	----	263,246	349,843	168,030	223,549	95,109	72,318	313,604	215,917	78,780	35,432	1,815,828
Sole, English	----	----	12,755	13,194	19,381	17,143	7,510	7,110	25,264	348	316	----	103,021
Sole, petrale	----	----	13,677	9,882	9,777	35,731	13,324	26,007	24,209	4,251	1,254	20	138,132
Sole, rex	----	----	29,212	27,210	12,518	9,708	6,087	4,323	17,450	2,175	4,156	3,994	116,833
Sole, sand	----	----	----	----	----	----	----	----	1,026	----	221	----	1,247
Miscellaneous (animal food)	----	----	53,100	111,122	37,199	26,980	1,055	1,227	22,741	73,420	11,822	----	338,666
Crustacean:													
Crab, market	----	----	216	----	52	----	----	----	----	----	----	----	268
Mollusk:													
Octopus	----	----	----	115	----	----	24	80	----	----	----	----	219
Total pounds	----	----	491,123	572,823	282,431	381,450	154,586	140,014	534,853	327,734	129,243	52,738	3,066,995
Grand total	5,361,651	1,441,148	2,825,429	3,098,400	4,043,668	5,220,867	3,990,689	5,177,869	6,677,057	4,056,751	2,090,001	1,286,319	45,269,849

TABLE 10

Monthly Landings of Commercial Fishing Boats in the San Francisco Area During 1969 *

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy	----	----	----	1,475	8,264	1,760	20,720	17,080	10,080	22,840	12,880	----	95,099
Blackfish	----	84,567	48,450	2	----	----	----	----	3,150	28,400	21,050	72,653	258,272
Bonito, Pacific	----	----	----	----	----	----	----	1,058	7,219	----	67	----	8,344
Cabezon	----	----	----	----	----	----	----	----	----	----	----	32	32
Carp	120	170,420	23,927	550	450	----	----	----	10,700	24,800	15,425	51,750	298,142
Croaker, white	4,064	165	1,215	95	440	240	1,015	292	1,073	7,580	1,610	1,625	19,414
Flounder	23,347	49,829	26,800	7,378	5,440	416	8,148	22,760	14,367	12,261	7,465	3,065	181,276
Flounder, arrowtooth	----	----	----	----	600	1,130	2,570	590	390	----	----	----	5,280
Hake, Pacific	----	----	----	----	----	----	18,655	----	----	7,085	----	----	25,740
Halibut, California	9,203	13,973	16,637	6,369	281	744	13,186	8,180	9,007	6,713	3,235	2,710	90,238
Hardhead	3,350	1,608	2,985	1,010	1,098	----	----	----	----	----	----	----	10,051
Herring, Pacific	18,212	9,120	----	----	----	----	95	----	----	----	----	----	27,427
Lingcod	4,484	5,859	13,352	5,976	31,911	34,674	14,278	6,659	13,722	8,723	20,098	9,113	168,849
Perch	566	807	3,510	6,625	----	----	951	1,449	2,036	2,674	6,308	3,628	28,554
Pompano, Pacific	13	----	----	----	----	----	----	----	----	65	----	----	78
Rockfish	33,799	14,796	135,743	24,512	63,193	80,511	27,467	30,499	62,526	53,052	53,564	28,807	608,469
Sablefish	42	5,698	54,495	9,068	6,479	9,687	7,808	830	7,354	24,420	49,470	32,901	208,252
Salmon	----	----	----	155,291	381,481	518,005	483,819	87,113	96,318	----	----	----	1,722,027
Sanddab	22,065	9,580	18,285	7,630	25,140	8,354	32,923	9,380	22,089	21,797	10,789	7,813	195,845
Seabass, white	----	----	----	----	----	----	50	45	54	----	----	----	149
Shark	3,123	1,933	3,426	763	689	8,266	18,803	2,306	4,336	6,551	7,377	2,545	60,118
Skate	2,455	6,250	4,007	200	95	----	600	400	----	3,600	1,900	1,200	20,707
Smelt	233	5,106	9,299	11,946	14,721	16,046	2,748	1,530	3,279	3,558	260	----	68,726
Smelt, whitebait	125	380	438	3,528	470	2,090	345	125	125	125	125	125	8,001
Sole, Dover	----	4,430	163,981	27,278	50,751	42,811	46,744	19,392	33,289	16,025	135,496	41,956	582,153
Sole, English	200,942	31,670	115,025	70,905	123,200	35,933	68,771	59,784	103,985	94,935	101,900	77,034	1,084,084
Sole, petrale	13,145	3,850	75,285	20,595	75,487	36,935	48,908	16,620	40,627	30,183	74,522	88,330	524,487
Sole, rex	9,620	3,345	39,090	11,750	18,740	8,515	8,127	5,592	14,129	28,166	26,537	18,008	191,619
Sole, sand	15,870	16,375	18,495	16,940	4,415	5,930	15,995	13,140	9,990	8,735	5,315	3,260	134,460
Sole, miscellaneous	----	----	----	----	320	----	----	----	1,260	1,145	880	----	3,605
Tuna, albacore	----	----	----	----	----	----	----	----	498,288	91,651	39,726	75,209	704,874
Tuna, skipjack	----	----	----	----	----	----	----	75	----	----	----	----	75
Turbot	2,115	970	1,675	1,835	1,210	1,100	1,755	5,755	1,295	2,106	160	315	20,291
Miscellaneous	----	----	----	----	----	----	----	----	553	291	560	63	1,467

Crustacean:													
Crab, market	107,061	58,072	16,383	5,267	5,558	1,426	----	----	----	----	760,349	319,421	1,273,537
Crayfish	----	----	----	----	----	----	----	375	175	----	----	----	550
Shrimp, bay	----	----	----	----	----	----	6,645	331	1,065	----	----	----	8,041
Abalone	1,304	----	1,400	850	383	1,021	550	12,208	200	2,849	1,265	----	22,030
Octopus	129	50	390	50	135	400	405	43	35	25	65	58	1,785
Mollusk:													
Oyster, eastern	1,334	1,762	911	2,115	714	1,161	1,487	1,324	1,332	1,100	1,873	1,839	16,952
Oyster, giant Pacific	18,453	14,781	17,520	14,957	12,806	17,102	15,752	19,695	22,265	24,064	23,863	21,586	222,844
Miscellaneous mollusk	----	----	----	----	----	----	----	----	----	12	12	25	49
Grand total	**495,174**	**515,396**	**812,724**	**414,960**	**834,471**	**834,257**	**869,320**	**344,630**	**996,313**	**535,531**	**1,384,146**	**865,071**	**8,901,993**

* Includes Sacramento area landings.

TABLE 11

Monthly Landings of Commercial Fishing Boats in the Monterey Area During 1969

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy	----	----	----	421,155	671,505	5,600	9,350	2,059,242	1,188,605	919,100	258,300	----	5,532,857
Bonito, Pacific	----	----	----	----	----	----	----	7,087	2,667	300	2,958	1,113	14,125
Cabezon	1,476	272	637	55	----	----	----	----	2,611	4,791	5,550	2,117	17,509
Croaker, white	8,762	15,475	2,948	3,238	1,011	6,869	5,189	3,197	13,898	27,909	11,191	8,691	118,378
Flounder	4,862	2,442	7,184	2,682	2,122	2,040	4,820	4,012	3,149	4,790	1,938	2,157	42,198
Greenling, kelp	130	194	----	25	----	----	----	----	----	20	----	----	369
Halibut, California	3,047	2,212	2,838	1,709	571	671	3,102	3,576	140	2,247	1,602	2,434	24,149
Herring, Pacific	----	----	----	11,705	82,760	39,690	8,950	----	----	----	----	----	143,105
Lingcod	4,532	1,918	3,508	1,120	1,147	3,221	1,775	362	1,825	6,985	10,688	3,083	40,164
Mackerel, jack	----	----	----	4,200	5,945	66,528	364,109	1,782	4,190	2,000	----	----	448,754
Perch	829	373	4,744	10,435	285	----	----	250	894	563	430	87	18,890
Pompano, Pacific	48	71	30	6,799	9,021	877	3,749	14,375	8,466	2,295	567	235	46,533
Rockfish	96,593	24,496	271,165	275,516	268,709	292,405	298,694	50,709	144,478	122,370	164,747	45,262	2,055,144
Sablefish	135,488	94,461	176,115	39,652	64,320	92,760	69,015	60,300	164,088	235,710	206,910	178,771	1,517,590
Salmon	----	----	----	236,770	225,099	132,728	113,725	103,313	10,105	----	----	----	821,740
Sanddab	5,820	10,540	20,137	4,525	9,130	16,845	9,757	10,175	18,786	10,320	17,620	4,050	137,705
Seabass, white	148	56	194	----	----	----	88	6,134	220	4,732	11,330	6,215	29,117
Shark	1,136	2,480	2,336	1,953	2,753	3,752	6,457	7,735	2,696	4,411	12,323	7,688	55,720
Skate	5,315	5,340	11,713	7,305	7,545	5,900	5,240	5,832	4,225	4,451	2,668	1,620	67,154
Smelt	13,738	9,415	395	3,144	1,273	353	1,317	1,358	2,407	2,954	----	----	36,354
Sole, Dover	----	----	2,710	175	4,595	9,250	13,955	4,140	3,525	835	455	----	39,640
Sole, English	14,340	20,960	67,762	47,689	39,890	58,780	53,310	29,295	37,625	37,233	27,950	20,825	455,659
Sole, petrale	1,620	6,300	63,100	37,940	24,410	26,320	23,470	16,148	21,664	11,557	13,780	4,480	250,789
Sole, rex	3,435	3,880	31,410	4,970	8,025	3,465	1,030	2,360	2,890	6,113	11,280	4,517	83,375
Sole, sand	2,520	1,290	1,715	1,395	1,540	4,560	5,250	2,045	1,310	1,682	695	1,525	25,527
Sole, miscellaneous	1,024	427	2,048	623	617	184	20	152	40	870	1,154	453	7,612
Tuna, albacore	----	----	----	----	----	----	160	14,901	540,387	252,303	51,221	41,725	900,697
Turbot	----	----	----	----	----	----	----	----	----	----	----	375	375

Crustacean:													
Crab, market	427	626	1,481	335	----	----	----	----	----	----	229	299	3,397
Crab, rock	48	----	194	42	----	----	----	----	----	----	154	154	592
Prawn, spot	1,584	619	92	----	----	----	----	----	----	----	825	1,953	5,073
Mollusk:													150
Abalone	----	----	----	----	----	----	150	----	----	----	----	----	728
Octopus	----	----	----	----	----	----	----	----	----	----	274	454	11,560,220
Squid	----	----	----	50	2,559,070	4,145,600	3,034,050	1,779,910	40,850	----	690	----	
Grand total	306,922	203,847	674,456	1,125,207	3,991,343	4,918,398	4,036,732	4,188,390	2,221,741	1,666,541	827,529	340,283	24,501,389

TABLE 12

Monthly Landings of Commercial Fishing Boats in the Santa Barbara Area During 1969

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy	47,600	3,200	3,750	485,525	758,480	23,950	35,400	49,200	933,700	5,260,012	6,670,860	5,589,776	19,861,453
Barracuda, California	----	----	----	----	----	10	----	----	----	----	----	----	10
Bonito, Pacific	28,734	----	----	----	----	----	11	11,660	18,680	703,499	131,445	53,781	947,810
Cabezon	1,183	326	649	42	35	----	339	267	270	1,181	2,814	1,006	8,112
Croaker, white	----	----	----	4,495	----	3,425	----	----	137	200	91	114	8,462
Flounder	202	462	6,054	347	65	----	----	----	48	31	----	130	7,339
Hake, Pacific	----	----	----	----	----	45	27	20	----	1,084	106	25	1,307
Halibut, California	6,907	1,010	2,117	1,350	5,008	7,809	12,860	8,925	1,820	93	1,003	2,680	51,582
Lingcod	3,982	85	1,406	1,141	4,817	12,853	4,479	3,233	6,105	5,953	1,713	1,065	46,832
Mackerel, jack	193,090	----	255,000	715,330	164,796	311,830	700,320	133,990	94,350	99,200	84,400	51,640	2,803,946
Mackerel, Pacific	----	----	----	2,400	1,000	----	----	----	----	----	3,400	----	6,800
Opaleye	----	----	----	----	----	----	----	4	----	----	----	----	4
Perch	2,415	621	3,417	4,086	1,253	----	2,652	3,325	2,212	1,203	3,065	456	24,705
Pompano, Pacific	----	----	----	----	----	----	----	----	----	435	700	----	1,135
Rockfish	135,180	47,552	168,761	192,674	231,822	331,864	252,960	177,678	313,733	210,409	266,863	167,218	2,496,714
Sablefish	----	----	----	----	----	----	1,275	110	----	----	----	----	1,385
Salmon	----	----	----	10,481	109,837	56,495	53,301	9,698	7,734	----	----	----	247,546
Sanddab	----	----	197	----	340	----	----	----	----	----	60	366	963
Sculpin	----	----	276	287	45	----	----	----	----	----	----	----	608
Sea bass, giant	14	----	----	----	303	305	113	77	35	----	220	10	1,077
Seabass, white	----	----	95	817	344	1,107	4,722	10,326	5,091	12,018	8,100	5,560	48,180
Shark	3,159	1,355	1,547	11,854	31,466	32,448	10,521	2,808	3,415	4,215	9,967	7,773	120,528
Sheephead, California	30	137	160	----	----	----	31	36	----	----	----	----	394
Skate	408	----	----	5	205	196	----	----	95	----	----	----	909
Smelt	----	----	----	----	251	----	----	----	----	----	----	----	251
Sole, Dover	----	----	340	495	2,180	3,965	2,800	6,470	6,755	130	----	----	23,135
Sole, English	59,674	83,335	66,005	28,352	18,410	9,186	9,479	25,134	31,767	46,692	28,767	23,862	430,663
Sole, petrale	3,626	1,791	12,428	18,074	30,709	21,028	14,134	41,414	42,729	17,534	4,960	3,566	211,993
Sole, rex	11,069	7,505	9,430	6,956	9,104	2,837	1,612	5,455	13,035	9,350	9,910	13,875	100,138
Sole, sand	92	45	----	115	----	----	----	----	----	----	129	225	606
Sole, miscellaneous	550	672	1,966	55	65	----	412	197	32	----	163	565	4,677
Swordfish	----	----	----	----	----	1,786	33,090	69,117	35,897	51,516	10,746	----	202,152
Tuna, albacore	----	----	----	----	----	----	53,957	39,020	166,136	506,274	308,774	122,248	1,196,409
Turbot	73	178	547	1,258	941	----	----	----	----	----	----	260	3,257
Miscellaneous (animal food)	34,540	15,615	26,205	39,711	46,785	62,505	85,155	28,840	26,953	39,323	31,895	18,025	455,552

Crustacean:													
Crab, market	43	----	----	----	50	----	----	----	----	----	----	----	93
Crab, rock	26,246	25,033	17,194	1,187	6,303	7,271	5,827	10,663	13,256	24,005	41,448	17,562	195,995
Lobster, spiny	19,675	14,252	5,950	----	----	----	----	----	----	17,131	20,428	21,819	99,255
Miscellaneous crustacean	----	----	----	----	----	----	----	----	----	----	----	36	36
Mollusk:													
Abalone	192,915	----	104,233	142,440	192,662	198,645	139,322	138,216	214,518	184,975	208,612	125,368	1,841,906
Oyster, giant Pacific	11,980	11,352	10,462	8,628	10,165	7,803	8,519	826	1,256	7,443	20,954	23,104	122,492
Squid	887,360	448,405	324,390	154,625	507,700	164,630	18,550	10,800	----	----	----	519,700	3,036,160
Miscellaneous mollusk	30	41	30	43	----	----	----	----	----	----	774	688	1,606
Total pounds	1,670,777	662,972	1,022,609	1,832,773	2,135,141	1,261,993	1,451,868	787,509	1,939,759	7,203,906	7,872,367	6,772,503	34,614,177
Waters south of State:													
Fish:													
Shark	----	74	----	----	----	----	----	----	----	----	----	----	74
Swordfish	----	612	----	----	----	----	----	----	----	----	----	----	612
Total pounds	----	686	----	----	----	----	----	----	----	----	----	----	686
Grand total	**1,670,777**	**663,658**	**1,022,609**	**1,832,773**	**2,135,141**	**1,261,993**	**1,451,868**	**787,509**	**1,939,759**	**7,203,906**	**7,872,367**	**6,772,503**	**34,614,863**

TABLE 13

Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Area During 1969

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy	2,825,870	759,958	3,618,843	15,288,994	6,910,134	42,356	73,010	65,965	3,221,176	24,639,913	23,760,700	28,570,825	109,777,744
Barracuda, California	----	----	3	1,103	19,010	18,555	5,436	485	166	2,147	8,051	----	54,956
Blacksmith	----	----	10,275	4,625	40,321	150,314	40,466	----	----	----	516	----	246,517
Bonito, Pacific	1,203,095	274,531	641,010	428,277	805,730	471,265	723,808	4,115,026	1,269,804	565,496	849,874	384,970	11,732,886
Croaker, white	60,332	60,515	64,770	45,415	24,584	16,150	4,652	4,567	226	6,315	22,987	65,934	376,447
Flyingfish	----	----	----	----	36,866	25,490	34,810	2,592	----	----	----	----	99,758
Halfmoon	40	----	870	1,820	1,488	493	28	----	831	3,620	2,165	3,112	14,467
Halibut, California	2,826	10,129	16,794	8,221	7,360	2,704	7,940	1,459	75	1,062	5,503	6,110	70,183
Lingcod	82	----	----	----	----	----	----	9	----	----	----	----	91
Mackerel, jack	3,598,753	4,018,857	5,081,600	3,549,217	4,629,959	3,570,858	5,519,975	3,242,386	5,576,570	6,850,874	1,611,998	1,417,415	48,668,462
Mackerel, Pacific	228,549	37,274	187,419	127,683	303,931	347,946	165,591	266,855	262,959	86,808	244,518	79,729	2,339,262
Opaleye	105	----	190	3,305	878	----	----	2,200	596	1,942	782	1,088	11,086
Perch	1,102	1,516	5,122	2,844	1,647	1,941	352	219	599	2,449	1,789	1,760	21,340
Pompano, Pacific	4,650	11,324	39,536	36,510	7,244	24,972	11,861	8,198	11,116	9,176	2,454	1,803	168,844
Rockfish	53,309	32,229	61,578	73,623	64,259	64,141	15,902	19,322	27,836	21,160	36,516	30,956	500,831
Sablefish	----	----	200	----	----	----	----	30	----	----	----	----	230
Salmon	----	----	----	----	----	----	----	13	----	10	----	----	23
Sanddab	12	----	----	----	----	----	----	170	250	70	10	----	512
Sardine	2,610	685	1,543	3,329	12,436	31,414	15,168	4,255	5,181	3,236	665	2,321	82,843
Sculpin	475	344	700	483	346	5,414	1,484	64	194	103	364	103	10,074
Sea bass, giant	53	892	127	----	40	90	780	304	----	316	----	----	2,602
Seabass, white	1,023	1,636	112	637	1,543	1,409	10,616	45,506	26,447	16,842	1,086	9,179	116,036
Shark	984	1,082	1,400	3,023	4,286	5,096	5,312	16,131	9,195	14,618	2,862	1,946	65,935
Sheephead, California	337	109	104	353	597	587	1,377	534	26	----	172	401	4,597
Smelt	95	----	----	3,045	19,645	3,860	3,320	1,365	3,860	54,040	52,811	17,780	159,821
Sole, miscellaneous	----	29	----	----	----	----	----	40	----	27	39	----	135
Swordfish	----	----	----	854	----	21,708	93,178	146,223	206,805	114,432	37,979	----	621,179
Tuna, albacore	----	----	----	----	----	----	128,004	223,907	366,027	1,379,879	755,209	441,458	3,294,484
Tuna, bluefin	----	----	----	----	----	16,789	241,443	472,799	66,850	----	----	----	797,881
Tuna, skipjack	----	----	----	----	----	----	----	----	56,375	17,490	----	----	73,865
Tuna, yellowfin	----	----	----	----	----	----	----	----	540	----	----	----	540
Whitefish, ocean	----	----	1,378	----	----	----	----	----	150	----	----	----	1,528
Yellowtail, California	----	----	----	----	79	292	276	191	134	190	----	102	1,264
Miscellaneous	----	----	----	----	2	9	----	4	----	35	----	----	50
Crustacean:													
Crab, rock	15,919	20,421	21,629	18,073	21,287	28,314	34,538	36,978	30,288	25,337	22,435	25,674	300,893
Lobster, spiny	19,661	14,128	6,392	----	----	----	----	----	----	35,033	25,027	27,079	127,320

Mollusk:													
Abalone	134,050	----	70,450	138,273	138,439	139,531	213,275	141,704	108,229	67,232	69,137	58,904	1,279,224
Octopus	----	----	----	----	----	----	----	----	----	2	----	----	2
Squid	889,333	769,175	616,300	514,795	211,500	100,400	9,000	58,300	10,780	70,390	1,146,650	1,786,360	6,182,983
Total pounds	9,043,265	6,014,834	10,448,345	20,254,502	13,263,611	5,092,098	7,361,602	8,877,801	11,263,285	33,990,244	28,662,299	32,935,009	187,206,895
Waters north of State:													
Fish:													
Tuna, albacore	----	----	----	----	----	----	----	----	63,998	2,421,729	14,376	----	2,500,103
Total pounds	----	----	----	----	----	----	----	----	63,998	2,421,729	14,376	----	2,500,103
Waters south of State:													
Fish:													
Bonito, Pacific	95	487	----	195	----	640,980	1,660,315	375,796	26,899	50,520	1,795	----	2,757,082
Cabrilla, spotted	----	----	----	----	----	----	----	3,898	----	----	----	----	3,898
Grouper	17,745	22,480	----	----	----	----	----	49,687	15,445	33,485	15,205	34,817	188,864
Halibut, California	----	219	33	87	229	200	50	----	----	86	25	----	929
Perch	37	----	----	----	27	----	36	----	----	----	265	----	365
Pompano, Pacific	----	200	----	----	----	----	----	----	----	----	----	----	200
Rockfish	7,118	18,485	1,882	1,940	1,290	2,988	72	14,258	16,165	16,148	23,053	20,063	123,462
Sea bass, giant	11,382	18,002	6,766	10,744	10,117	1,967	2,225	7,903	14,674	15,590	11,267	12,976	123,613
Seabass, white	43,643	84,655	150,323	135,544	69,705	7,591	4,058	19,338	79,521	72,249	32,224	24,519	723,370
Shark	2,520	1,485	----	1,545	595	----	----	577	----	430	----	----	7,152
Sheephead, California	196	----	----	----	38	----	73	219	----	----	----	----	526
Sole, Miscellaneous	----	----	----	----	----	----	----	78	----	----	----	----	78
Swordfish	----	2,885	----	----	----	----	----	----	----	----	----	----	2,885
Tuna, albacore	----	----	----	----	----	----	4,548	2,565	16,435	----	----	----	23,548
Tuna, bigeye	2,038	72,400	99,445	----	----	----	----	10,625	----	----	9,280	----	193,788
Tuna, bluefin	22,365	----	----	202,285	169,511	1,200,228	3,493,933	2,272,341	2,714,264	194,917	----	108,443	10,378,287
Tuna, skipjack	1,271,796	1,079,105	3,161,630	6,395,382	3,531,740	2,489,773	4,610,830	2,812,739	1,504,102	3,309,261	3,445,504	555,820	34,167,682
Tuna, yellowfin	3,766,655	25,403,250	24,461,040	28,664,914	27,753,745	12,783,448	5,158,404	1,486,116	7,834,806	7,381,639	5,270,832	10,232,974	160,197,823
Whitefish, ocean	290	1,199	----	----	----	----	----	----	----	162	51	----	1,702
Yellowtail, California	27,507	32,270	7,031	4,000	9,267	6,445	9,339	5,894	29,716	26,132	23,220	17,730	198,551
Total pounds	5,173,387	26,737,122	27,888,150	35,416,636	31,546,264	17,133,620	14,943,883	7,062,034	12,252,027	11,100,619	8,832,721	11,007,342	209,093,805
SHIPMENTS:*													
Fish:													
Tuna, albacore	1,541,494	1,166,008	2,135,074	1,107,002	2,672,856	2,980,219	5,296,108	12,867,665	6,779,797	5,530,150	8,068,623	1,659,315	51,804,311
Tuna, bigeye	1,695	----	----	----	----	----	----	----	----	----	----	----	1,695
Tuna, bluefin	----	----	----	----	----	58,136	314,453	----	----	----	----	----	372,589
Tuna, skipjack	1,759,421	206,985	----	132,760	84,964	4,220	----	9,977	504,914	62,355	----	----	2,765,596
Tuna, yellowfin	1,571,970	1,496,638	2,927,077	2,787,098	4,938,673	7,090,314	4,262,558	3,409,445	1,470,410	2,043,583	1,790,608	1,815,529	35,603,903
Total pounds	4,874,580	2,869,631	5,062,151	4,026,860	7,696,493	10,132,889	9,873,119	16,287,087	8,755,121	7,636,088	9,859,231	3,474,844	90,548,094
Grand total	**19,091,232**	**35,621,587**	**43,398,646**	**59,697,998**	**52,506,368**	**32,358,607**	**32,178,604**	**32,226,922**	**32,334,431**	**55,148,680**	**47,368,627**	**47,417,195**	**489,348,897**

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 14

Monthly Landings and Shipments of Commercial Fish Into the San Diego Area During 1969

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy	----	----	3,965	4,600	----	----	----	----	----	----	----	----	8,565
Barracuda, California	457	152	----	3,044	6,673	3,671	1,382	327	32	8	81	40	15,867
Bonito, Pacific	624	----	----	963	10,211	11,272	29,507	389,486	19,726	6,741	845	380	469,755
Croaker, white	545	35	32	108	240	238	90	312	637	188	45	343	2,813
Halfmoon	1,812	165	735	2,156	368	1,521	908	2,899	1,415	----	317	50	12,346
Halibut, California	601	1,104	390	2,033	993	3,177	10,530	6,251	2,573	2,592	4,682	1,195	36,121
Lingcod	108	110	----	10	----	----	25	26	----	16	24	11	330
Mackerel, Pacific	----	42	4,729	2,416	460	2,508	829	----	----	----	148	----	11,132
Opaleye	----	----	----	158	3,925	579	97	----	----	----	----	----	4,759
Perch	1,288	220	818	2,624	1,828	1,940	2,894	3,204	2,026	2,351	1,921	581	21,695
Pompano, Pacific	----	135	----	----	----	33	----	----	----	----	----	----	168
Rockfish	21,610	25,107	27,362	29,741	15,711	16,252	8,236	11,107	7,419	11,625	11,712	2,999	188,881
Sablefish	----	----	----	167	100	----	----	----	----	----	136	420	823
Sardine	----	----	8,830	----	----	----	----	----	----	----	5,500	8,100	22,430
Sculpin	10,176	2,070	750	4,055	6,040	4,416	8,362	9,608	5,925	3,549	7,609	964	63,524
Sea bass, giant	1,488	831	4	388	76	137	631	121	112	----	162	55	4,005
Seabass, white	9,837	2,398	1,005	2,753	8,390	2,975	5,512	11,850	6,182	2,254	217	4,051	57,424
Shark	6,351	166	3,586	10,932	6,160	11,447	28,788	24,917	7,771	13,812	10,171	20,757	144,858
Sheephead, California	373	75	225	752	702	846	2,474	200	114	560	885	253	7,459
Smelt	50	----	----	----	----	----	----	----	----	----	----	----	50
Sole, miscellaneous	39	4	320	203	----	----	95	22	157	43	9	----	892
Swordfish	----	----	----	----	----	2,742	10,779	43,064	69,624	69,128	5,850	----	201,187
Tuna, albacore	----	----	----	----	----	----	6,304	28,582	11,904	270,851	51,877	10,538	380,056
Tuna, bluefin	----	----	----	----	----	11	----	----	166	----	----	----	177
Tuna, skipjack	----	----	----	----	----	----	----	----	220	----	----	----	220
Tuna, yellowfin	----	----	----	----	----	----	----	----	177	----	----	----	177
Whitefish, ocean	----	----	----	----	100	----	224	406	69	86	----	----	885
Yellowtail, California	861	320	16	402	1,420	546	1,263	1,395	262	845	281	2,869	10,480
Miscellaneous	----	----	----	24	28	----	----	----	----	----	----	----	52
Crustacean:													
Crab, rock	446	1,126	328	156	----	----	----	----	----	----	20	80	2,156
Lobster, spiny	8,843	3,886	3,558	----	----	----	----	----	----	33,356	20,685	12,569	82,897
Mollusk:													
Abalone	48,670	----	26,118	33,674	51,808	81,142	60,972	37,533	42,347	50,883	60,505	21,116	514,768
Squid	----	----	----	----	19	----	----	----	----	----	----	----	19
Total pounds	114,179	37,946	82,771	101,359	115,252	145,453	179,902	571,310	178,858	468,888	183,682	87,371	2,266,971

Waters north of State:													
Fish:													
Tuna, albacore	----	----	----	----	----	----	----	----	34,327	491,974	----	----	526,301
Total pounds	----	----	----	----	----	----	----	----	34,327	491,974	----	----	526,301
Waters south of State:													
Fish:													
Barracuda, California	550	300	----	450	2,131	94	----	----	----	----	235	----	3,760
Bonito, Pacific	805	----	----	----	----	374,728	573,798	317,939	----	----	2,644	346	1,270,260
Cabrilla, spotted	----	----	----	----	----	----	1,690	----	----	----	----	167	1,857
Grouper	----	27,627	----	----	----	----	310	----	----	----	10,975	27,335	66,247
Halfmoon	----	----	----	----	----	215	----	----	----	----	----	----	215
Halibut, California	----	----	467	202	68	----	----	280	----	----	----	----	1,017
Opaleye	----	----	----	----	----	80	----	----	----	----	----	----	80
Perch	----	----	----	----	940	324	----	----	----	----	----	----	1,264
Rockfish	5,120	4,186	4,210	1,698	3,769	45	2,765	----	----	4,163	7,086	----	33,042
Sculpin	----	----	----	1,127	3,250	12,370	9,724	14,794	----	----	----	----	41,265
Sea bass, giant	1,407	3,156	4,656	885	4,520	27	370	----	----	1,392	4,357	2,694	23,464
Seabass, white	7,251	6,295	46,290	2,710	11,844	102	8,575	209	4,669	20,576	14,701	1,210	124,432
Shark	3,981	----	5,271	----	1,107	----	----	231	----	481	3,948	3,687	18,706
Sheephead, California	----	----	----	----	190	----	----	----	----	50	----	69	309
Swordfish	----	1,097	----	----	----	----	----	180	----	----	950	1,341	3,568
Tuna, albacore	----	----	----	----	----	----	57,151	194,410	257,915	----	----	225	509,701
Tuna, bigeye	32,973	----	----	----	----	----	----	2,858	----	----	----	----	35,831
Tuna, bluefin	----	----	----	266,190	----	738,018	348,727	1,355,260	783,836	457,951	108,403	----	4,058,385
Tuna, skipjack	276,288	6,669	450,815	778,159	1,090,364	263,741	1,107,458	1,433,831	223,810	1,493,770	3,713,443	834,295	11,672,643
Tuna, yellowfin	828,106	9,788,406	5,775,518	9,396,189	7,624,373	4,588,019	987,366	674,575	405,620	1,187,015	1,177,612	1,530,598	43,963,397
Whitefish, ocean	----	----	----	----	----	----	----	95	100	80	100	----	375
Yellowtail, California	5,169	875	3,826	----	180	----	925	----	291	4,525	7,008	1,061	23,860
Miscellaneous	----	----	----	----	----	10	----	----	----	----	----	----	10
Total pounds	1,161,650	9,838,611	6,291,053	10,447,610	8,742,736	5,977,773	3,098,859	3,994,662	1,676,241	3,170,003	5,051,462	2,403,028	61,853,688
SHIPMENTS:*													
Fish:													
Tuna, albacore	----	----	1,345,562	----	14,320	1,100,230	119,800	512,554	465,268	452,453	518,533	----	4,528,720
Tuna, yellowfin	----	197,450	----	----	206,830	----	----	----	60,772	40,142	475,476	----	980,670
Total, pounds	----	197,450	1,345,562	----	221,150	1,100,230	119,800	512,554	526,040	492,595	994,009	----	5,509,390
Grand total	1,275,829	10,074,007	7,719,386	10,548,969	9,079,138	7,223,456	3,398,561	5,078,526	2,415,466	4,623,460	6,229,153	2,490,399	70,156,350

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 15

Value of Landings and Shipments of Commercial Fish Into California by Area, 1969

Species	Eureka	San Francisco*	Monterey	Santa Barbara	Los Angeles	San Diego	Total
LANDINGS:							
Fish:							
Anchovy	2,000	95,099	5,532,857	19,861,453	109,777,744	8,565	135,277,718
	----	$8,559	$69,065	$202,322	$1,072,059	$825	$1,352,830
Barracuda, California	----	----	----	10	54,956	19,627	74,593
	----	----	----	$3	$12,590	$4,287	$16,880
Blackfish	----	258,272	----	----	----	----	258,272
	----	$77,482	----	----	----	----	$77,482
Blacksmith	----	----	----	----	246,517	----	246,517
	----	----	----	----	$6,259	----	$6,259
Bonito, Pacific	1,585	8,344	14,125	947,810	14,489,968	1,740,015	17,201,847
	$186	$765	$758	$40,488	$676,676	$86,353	$805,226
Cabezon	184	32	17,509	8,112	----	----	25,837
	$3	$1	$975	$299	----	----	$1,278
Cabrilla, spotted	----	----	----	----	3,898	1,857	5,755
	----	----	----	----	$702	$371	$1,073
Carp	----	298,142	----	----	----	----	298,142
	----	$21,207	----	----	----	----	$21,207
Croaker, white	----	19,414	118,378	8,462	376,447	2,813	525,514
	----	$1,192	$7,989	$219	$31,421	$339	$41,160
Flounder	144,027	181,276	42,198	7,339	----	----	374,840
	$7,222	$11,871	$3,493	$587	----	----	$23,173
Flounder, arrowtooth	4,706	5,280	----	----	----	----	9,986
	$206	$293	----	----	----	----	$499
Flyingfish	----	----	----	----	99,758	----	99,758
	----	----	----	----	$14,972	----	$14,972
Greenling, kelp	51	----	369	----	----	----	420
	----	----	$16	----	----	----	$16
Grouper	----	----	----	----	188,864	66,247	255,111
	----	----	----	----	$45,805	$16,562	$62,367
Hake, Pacific	----	25,740	----	1,307	----	----	27,047
	----	$515	----	$26	----	----	$541
Halfmoon	----	----	----	----	14,467	12,561	27,028
	----	----	----	----	$3,429	$2,689	$6,118
Halibut, California	58	90,238	24,149	51,582	71,112	37,138	274,277
	$22	$22,999	$6,593	$17,968	$24,834	$12,678	$85,094
Hardhead	----	10,051	----	----	----	----	10,051
	----	$2,010	----	----	----	----	$2,010
Herring, Pacific	----	27,427	143,105	----	----	----	170,532
	----	$7,131	$8,628	----	----	----	$15,759
Lingcod	857,242	168,849	40,164	46,832	91	330	1,113,508
	$78,338	$13,232	$5,015	$4,851	$14	$33	$101,483
Mackerel, jack	----	----	448,754	2,803,946	48,668,462	----	51,921,162
	----	----	$19,129	$105,164	$1,842,725	----	$1,967,018
Mackerel, Pacific	----	----	----	6,800	2,339,262	11,132	2,357,194
	----	----	----	$297	$120,894	$933	$122,124
Opaleye	----	----	----	4	11,086	4,839	15,929
	----	----	----	$1	$2,272	$1,045	$3,318
Perch	39,715	28,554	18,890	24,705	21,705	22,959	156,528
	$7,221	$10,277	$3,428	$5,781	$5,105	$3,912	$35,724
Pompano, Pacific	----	78	46,533	1,135	169,044	168	216,958
	----	$40	$16,925	$118	$30,151	$36	$47,270
Rockfish	3,220,908	608,469	2,055,144	2,496,714	624,293	221,923	9,227,451
	$183,768	$47,018	$157,773	$160,918	$109,606	$35,166	$694,249
Sablefish	2,428,566	208,252	1,517,590	1,385	230	823	4,156,846
	$199,147	$10,978	$99,633	$62	$69	$159	$310,048
Salmon	3,359,570	1,722,027	821,740	247,546	23	----	6,150,906
	$1,983,138	$1,118,398	$557,082	$184,495	$20	----	$3,843,133
Sanddab	361,457	195,845	137,705	963	512	----	696,482
	$35,812	$18,026	$10,823	$97	$102	----	$64,860
Sardine	----	----	----	----	82,843	22,430	105,273
	----	----	----	----	$9,218	$4,817	$14,035
Sculpin	----	----	----	608	10,074	104,789	115,471
	----	----	----	$73	$3,650	$29,476	$33,199
Sea bass, giant	----	----	----	1,077	126,215	27,469	154,761
	----	----	----	$180	$24,061	$5,465	$29,706
Seabass, white	----	149	29,117	48,180	839,406	181,856	1,098,708
	----	$45	$9,084	$17,563	$265,641	$59,101	$351,434
Shark	5,144	60,118	55,720	120,602	73,087	163,564	478,235
	$258	$3,088	$2,151	$12,482	$9,669	$24,540	$52,188
Sheephead, California	----	----	----	394	5,123	7,768	13,285
	----	----	----	$32	$500	$903	$1,435
Skate	17,298	20,707	67,154	909	----	----	106,068
	$6	$256	$1,010	$63	----	----	$1,335

TABLE 15—Continued

Value of Landings and Shipments of Commercial Fish Into California by Area, 1969

Species	Eureka	San Francisco*	Monterey	Santa Barbara	Los Angeles	San Diego	Total
Smelt	148,259	68,726	36,354	251	159,821	50	413,461
	$10,697	$8,517	$4,420	$9	$6,508	$6	$30,157
Smelt, whitebait	153,448	8,001	----	----	----	----	161,449
	$15,435	$1,127	----	----	----	----	$16,562
Sole, Dover	12,274,054	582,153	39,640	23,135	----	----	12,918,982
	$882,785	$38,468	$2,524	$1,408	----	----	$925,185
Sole, English	1,833,641	1,084,084	455,659	430,663	----	----	3,804,047
	$171,450	$92,052	$39,144	$31,779	----	----	$334,425
Sole, petrale	1,879,795	524,487	250,789	211,993	----	----	2,867,064
	$268,388	$76,840	$39,139	$29,756	----	----	$414,123
Sole, rex	1,884,033	191,619	83,375	100,138	----	----	2,259,165
	$183,438	$18,285	$6,773	$9,283	----	----	$217,779
Sole, sand	43,171	134,460	25,527	606	----	----	203,764
	$4,325	$15,622	$3,199	$75	----	----	$23,221
Sole, Miscellaneous	101	3,605	7,612	4,677	213	892	17,100
	$12	$360	$763	$505	$36	$237	$1,913
Swordfish	----	----	----	202,764	624,064	204,755	1,031,583
	----	----	----	$96,747	$318,794	$95,034	$510,575
Tuna, albacore	4,686,222	704,874	900,697	1,196,409	5,818,135	1,416,058	14,722,395
	$937,734	$141,244	$184,536	$245,799	$1,308,537	$318,254	$3,136,104
Tuna, bigeye	----	----	----	----	193,788	35,831	229,619
	----	----	----	----	$30,929	$5,659	$36,588
Tuna, bluefin	----	----	----	----	11,176,168	4,058,562	15,234,730
	----	----	----	----	$1,784,220	$620,858	$2,405,078
Tuna, skipjack	----	75	----	----	34,241,547	11,672,863	45,914,485
	----	$12	----	----	$4,566,643	$1,592,890	$6,159,545
Tuna, yellowfin	----	----	----	----	160,198,363	43,963,574	204,161,937
	----	----	----	----	$25,848,825	$7,107,737	$32,956,562
Turbot	1,110	20,291	375	3,257	----	----	25,033
	$95	$997	$19	$258	----	----	$1,369
Whitefish, ocean	----	----	----	----	3,230	1,260	4,490
	----	----	----	----	$407	$111	$518
Yellowtail, California	----	----	----	----	199,815	34,340	234,155
	----	----	----	----	$24,777	$3,710	$28,487
Miscellaneous	597	1,467	----	----	50	62	2,176
	$30	$76	----	----	$9	$13	$128
Miscellaneous (animal food)	1,956,031	----	----	455,552	----	----	2,411,583
	$39,119	----	----	$9,111	----	----	$48,230
Crustacean:							
Crab, market	6,661,969	1,273,537	3,397	93	----	----	7,938,996
	$1,795,021	$498,442	$1,431	$47	----	----	$2,294,941
Crab, rock	4,440	----	592	195,995	300,893	2,156	504,076
	----	----	$32	$17,345	$37,607	$164	$55,148
Crayfish	----	550	----	----	----	----	550
	----	----	----	----	----	----	----
Lobster, spiny	----	----	----	99,255	127,320	82,897	309,472
	----	----	----	$102,400	$144,522	$99,811	$346,733
Prawn, spot	----	----	5,073	----	----	----	5,073
	----	----	$4,705	----	----	----	$4,705
Shrimp, bay	----	8,041	----	----	----	----	8,041
	----	$1,633	----	----	----	----	$1,633
Shrimp, ocean	2,947,563	----	----	----	----	----	2,947,563
	$412,652	----	----	----	----	----	$412,652
Miscellaneous crustacean	----	----	----	36	----	----	36
	----	----	----	$4	----	----	$4
Mollusk:							
Abalone	----	22,030	150	1,841,906	1,279,224	514,768	3,658,078
	----	$7,745	$45	$589,204	$415,426	$148,527	$1,160,947
Octopus	2,147	1,785	728	----	2	----	4,662
	$88	$84	$109	----	$1	----	$282
Oyster, eastern	----	16,952	----	----	----	----	16,952
	----	$50,258	----	----	----	----	$50,258
Oyster, giant Pacific	350,757	222,844	----	122,492	----	----	696,093
	$81,551	$51,811	----	$28,479	----	----	$161,841
Squid	----	----	11,560,220	3,036,160	6,182,983	19	20,779,382
	----	----	$388,107	$43,109	$124,206	$4	$555,426
Miscellaneous mollusk	----	49	----	1,606	----	----	1,655
	----	----	----	$18,700	----	----	$18,700
Total pounds	45,269,849	8,901,993	24,501,389	34,614,863	398,800,803	64,646,960	576,735,857
Total value	$7,298,147	$2,378,956	$1,654,516	$1,978,107	$38,923,891	$10,282,705	$62,516,322

TABLE 15—Continued

Value of Landings and Shipments of Commercial Fish Into California by Area, 1969

Species	Eureka	San Francisco*	Monterey	Santa Barbara	Los Angeles	San Diego	Total
SHIPMENTS:†							
Fish:							
Tuna, albacore	----	----	----	----	51,804,311	4,528,720	56,333,031
	----	----	----	----	$13,657,854	$1,227,513	$14,885,367
Tuna, bigeye	----	----	----	----	1,695	----	1,695
	----	----	----	----	$356	----	$356
Tuna, bluefin	----	----	----	----	372,589	----	372,589
	----	----	----	----	$56,930	----	$56,930
Tuna, skipjack	----	----	----	----	2,765,596	----	2,765,596
	----	----	----	----	$398,230	----	$398,230
Tuna, yellowfin	----	----	----	----	35,603,903	980,670	36,584,573
	----	----	----	----	$7,366,742	$212,222	$7,578,964
Total pounds	----	----	----	----	90,548,094	5,509,390	96,057,484
Total value	----	----	----	----	$21,480,112	$1,439,735	$22,919,847
GRAND TOTAL POUNDS	45,269,849	8,901,993	24,501,389	34,614,863	489,348,897	70,156,350	672,793,341
GRAND TOTAL VALUE	$7,298,147	$2,378,956	$1,654,516	$1,978,107	$60,404,003	$11,722,440	$85,436,169

* Includes Sacramento area landings.
† For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 16

Value of Landings by Port, Eureka Area, 1969

	Value	Pounds
EUREKA		
Salmon	$708,686	1,198,238
Market crab	822,784	3,053,649
Albacore	625,670	3,126,717
Dover sole	630,599	8,767,717
Ocean shrimp	92,795	662,831
Giant Pacific oyster	81,551	350,757
Petrale sole	158,535	1,110,385
Rex sole	124,654	1,280,280
Sablefish	95,725	1,167,356
Rockfish	95,884	1,696,554
English sole	107,454	1,149,208
Lingcod	31,342	342,970
Sanddab	28,538	288,036
Whitebait smelt	9,542	94,861
Smelt	9,015	126,085
Perch	4,223	23,094
Flounder	3,800	75,778
Sand sole	2,934	29,288
Miscellaneous (animal food)	37,141	1,857,096
All other species	292	27,448
Port totals	$3,671,164	26,428,348
Crescent City		
Market crab	$747,508	2,774,272
Ocean shrimp	319,857	2,284,732
Salmon	238,051	431,280
Dover sole	144,923	2,014,971
Albacore	106,803	533,736
Petrale sole	65,763	460,603
Rex sole	41,001	421,106
English sole	39,889	426,607
Rockfish	35,628	611,610
Sablefish	28,418	346,555
Lingcod	26,431	289,228
Sanddab	5,467	55,179
Flounder	3,357	66,950
Whitebait smelt	3,047	30,293
Perch	2,768	14,896
Sand sole	1,358	13,558
All other species	949	35,490
Port totals	$1,811,218	10,811,066
Fort Bragg		
Salmon	$890,883	1,475,500
Albacore	205,261	1,025,769
Market crab	131,799	489,152
Dover sole	107,263	1,491,366
Sablefish	75,004	914,655
Rockfish	52,235	912,381
Petrale sole	44,090	308,807
English sole	24,107	257,826
Lingcod	20,555	224,931
Rex sole	17,783	182,647
Whitebait smelt	2,846	28,294
Sanddab	1,807	18,242
Miscellaneous (animal food)	1,452	72,612
Smelt	1,379	17,961
All other species	822	10,293
Port totals	$1,577,286	7,430,436
Trinidad		
Market crab	$92,930	344,896
Salmon	39,508	72,545
All other species	23	344
Port totals	$132,461	417,785

TABLE 16—Continued
Value of Landings by Port, Eureka Area, 1969

	Value	Pounds
Albion		
Salmon	$85,075	146,309
All other species	8	132
Port totals	$85,083	146,441
Point Arena		
Salmon	$20,911	35,650
Port totals	$20,911	35,650
All other ports		
All species	$24	123
Totals	$24	123
EUREKA AREA TOTALS	$7,298,147	45,269,849

TABLE 17

Value of Landings by Port, San Francisco Area, 1969 *

	Value	Pounds
Bodega Bay		
Salmon	$437,442	676,560
Market crab	142,050	362,942
English sole	37,824	445,444
Albacore	36,069	180,001
Petrale sole	17,186	117,308
Rockfish	12,841	146,914
Dover sole	10,359	156,767
Smelt	8,186	65,785
Rex sole	7,498	78,574
Lingcod	4,781	61,005
Sanddab	3,616	39,284
Flounder	1,960	29,923
Sablefish	1,398	26,519
All other species	2,304	25,674
Port totals	$723,514	2,412,700
San Francisco		
Market crab	$235,736	602,314
Salmon	180,698	278,769
Petrale sole	50,095	341,934
English sole	44,750	527,015
Rockfish	27,695	375,235
Dover sole	26,734	404,583
Sand sole	13,905	119,680
California halibut	12,369	48,530
Sanddab	11,112	120,726
Sablefish	9,083	172,313
Rex sole	8,737	91,560
Flounder	7,518	114,805
Lingcod	6,248	79,724
Albacore	4,807	23,989
Perch	2,134	5,787
All other species	3,850	94,179
Port totals	$645,471	3,401,143
Point Reyes		
Salmon	$187,151	285,786
Market crab	55,929	142,901
Giant Pacific oyster	46,201	198,712
English sole	8,495	100,050
Petrale sole	8,409	57,395
Rockfish	4,564	64,838
Flounder	2,199	33,580
Sanddab	2,022	21,970
Lingcod	1,871	23,877
California halibut	1,649	6,471
Rex sole	1,633	17,115
Sand sole	1,589	13,675
Dover sole	1,375	20,803
All other species	692	13,633
Port totals	$323,779	1,000,806
Sausalito		
Salmon	$164,991	252,290
Albacore	62,685	312,828
Market crab	40,499	103,476
Anchovy	8,559	95,099
Pacific herring	2,915	11,212
All other species	249	929
Port totals	$279,898	775,834
Princeton		
Salmon	$97,705	150,805
Market crab	16,542	42,266
California halibut	8,594	33,718
Abalone	4,669	13,280
Rockfish	1,918	21,482

TABLE 17—Continued
Value of Landings by Port, San Francisco Area, 1969 *

	Value	Pounds
Princeton—Continued		
Shark	$1,286	26,171
Sanddab	1,276	13,865
Petrale sole	1,150	7,850
All other species	3,250	41,008
Port totals	$136,390	350,445
Clear Lake		
Blackfish	$77,482	258,272
Carp	21,207	298,142
Hardhead	2,010	10,051
All other species	76	270
Port totals	$100,775	566,735
Oakland		
Salmon	$46,538	71,839
Albacore	37,650	187,892
Abalone	2,355	6,700
All other species	496	1,376
Port totals	$87,039	267,807
Tomales Bay		
Eastern oyster	$50,258	16,952
Giant Pacific oyster	5,610	24,132
Pacific herring	3,957	15,220
Perch	2,890	7,954
All other species	1,474	13,693
Port totals	$64,189	77,951
Richmond		
Market crab	$5,387	13,763
Perch	1,843	5,067
All other species	155	253
Port totals	$7,385	19,083
Berkeley		
Salmon	$3,682	5,683
All other species	885	2,530
Port totals	$4,567	8,213
Alameda		
Perch	$1,488	4,007
All other species	721	2,050
Port totals	$2,209	6,057
All other ports		
Market crab	$1,843	4,710
Bay shrimp	1,630	8,025
All species	267	2,484
Totals	$3,740	15,219
SAN FRANCISCO AREA TOTALS	$2,378,956	8,901,993

* Includes Sacramento area landings.

TABLE 18

Value of Landings by Port, Monterey Area, 1969

	Value	Pounds
Monterey		
Squid	$351,345	10,465,220
Salmon	130,496	192,432
Rockfish	121,947	1,565,951
Sablefish	88,356	1,345,830
Petrale sole	22,326	143,054
English sole	21,292	247,853
Albacore	8,930	43,586
White croaker	5,051	74,839
Spot prawn	4,705	5,073
Pacific pompano	3,380	9,293
Sanddab	3,256	41,430
Perch	3,210	17,239
Rex sole	2,498	30,756
Lingcod	2,104	16,854
Anchovy	2,093	167,650
California halibut	1,999	7,322
Jack mackerel	1,586	37,213
Pacific herring	1,158	19,200
All other species	4,352	83,865
Port totals	$780,084	14,514,660
Moss Landing		
Salmon	$365,261	538,816
Albacore	175,403	856,120
Anchovy	66,972	5,365,207
Squid	36,762	1,095,000
Rockfish	33,977	466,487
English sole	17,849	207,771
Jack mackerel	17,502	410,569
Petrale sole	16,803	107,670
Sablefish	11,254	171,415
Sanddab	7,562	96,208
Pacific herring	7,466	123,835
Rex sole	4,275	52,619
Smelt	3,666	28,018
Sand sole	3,170	25,297
White croaker	2,415	35,791
Flounder	2,173	26,250
California halibut	1,675	6,135
Dover sole	1,615	25,365
Lingcod	1,350	10,810
All other species	2,357	55,034
Port totals	$779,507	9,704,417
Santa Cruz		
Salmon	$61,325	90,492
Pacific pompano	13,409	36,866
White seabass	9,035	28,960
California halibut	2,919	10,692
Rockfish	1,849	22,706
Lingcod	1,561	12,500
All other species	4,827	80,096
Port totals	$94,925	282,312
MONTEREY AREA TOTALS	**$1,654,516**	**24,501,389**

TABLE 19
Value of Landings by Port, Santa Barbara Area, 1969

	Value	Pounds
Santa Barbara		
Abalone	$376,183	1,166,239
Swordfish	83,620	175,254
Spiny lobster	77,880	75,488
Rockfish	66,822	1,067,389
English sole	23,767	322,077
Rock crab	11,189	126,435
White seabass	8,763	24,040
California halibut	8,472	24,320
Shark	7,709	75,167
Petrale sole	7,525	53,610
Miscellaneous (animal food)	7,190	359,491
Rex sole	4,333	46,744
Salmon	2,233	2,958
All other species	1,697	29,394
Port totals	$687,383	3,548,606
Morro Bay		
Albacore	$229,177	1,115,501
Abalone	136,745	433,475
Rockfish	69,005	1,065,708
Giant Pacific oyster	28,479	122,492
Miscellaneous mollusk	18,700	1,606
Salmon	17,222	23,393
Petrale sole	15,042	107,161
Rock crab	6,012	67,937
California halibut	5,609	16,102
Perch	5,467	23,423
English sole	4,960	67,221
Lingcod	4,286	41,382
White seabass	3,362	9,222
Spiny lobster	3,330	3,228
Rex sole	3,154	34,024
Shark	1,998	18,854
Miscellaneous (animal food)	1,274	63,705
All other species	2,428	44,430
Port totals	$556,250	3,258,864
Port Hueneme		
Anchovy	$202,322	19,861,453
Jack mackerel	105,159	2,803,806
Squid	43,109	3,036,160
Pacific bonito	38,458	900,285
Swordfish	9,303	19,497
Abalone	6,384	22,346
Spiny lobster	4,697	4,553
California halibut	2,474	7,103
All other species	1,920	19,524
Port totals	$413,826	26,674,727
Avila		
Salmon	$165,040	221,195
Abalone	58,026	184,132
Rockfish	23,856	351,876
Albacore	15,392	74,917
Petrale sole	6,967	49,638
White seabass	4,771	13,089
English sole	3,005	40,726
Shark	2,104	20,529
Rex sole	1,796	19,370
All other species	3,553	71,841
Port totals	$284,510	1,047,313

TABLE 19—Continued

Value of Landings by Port, Santa Barbara Area, 1969

	Value	Pounds
Oxnard		
Spiny lobster	$16,050	15,557
Abalone	11,157	33,617
Swordfish	3,607	7,559
Rockfish	1,138	10,200
All other species	2,241	10,788
Port totals	$34,193	77,721
All other ports		
All species	$1,945	7,632
Totals	$1,945	7,632
SANTA BARBARA AREA TOTALS	**$1,978,107**	**34,614,863**

TABLE 20

Value of Landings and Shipments by Port, Los Angeles Area, 1969

	Value	Pounds
Terminal Island		
Landings:		
Yellowfin tuna	$25,763,114	159,667,169
Skipjack tuna	4,565,383	34,232,102
Bluefin tuna	1,679,008	10,517,132
Jack mackerel	1,531,080	40,437,566
Albacore	1,290,312	5,737,098
Anchovy	1,039,372	106,430,650
Pacific bonito	488,051	10,450,845
Pacific mackerel	73,839	1,428,764
Squid	38,290	1,906,088
Bigeye tuna	30,929	193,788
Sardine	5,285	47,499
All other species	2,330	35,477
Total landings	$36,506,993	371,084,178
Shipments:*		
Albacore	$13,657,854	51,804,311
Yellowfin tuna	7,366,742	35,603,903
Skipjack tuna	398,230	2,765,596
Bluefin tuna	56,930	372,589
All other species	356	1,695
Total shipments	$21,480,112	90,548,094
Port totals	$57,987,105	461,632,272
San Pedro		
Landings:		
Abalone	$353,801	1,089,482
White seabass	262,030	827,995
Swordfish	181,604	355,505
Pacific bonito	141,572	3,031,552
Jack mackerel	125,041	3,302,464
Bluefin tuna	105,212	659,036
Rockfish	96,822	556,214
Squid	85,916	4,276,895
Yellowfin tuna	85,369	529,073
Spiny lobster	54,430	47,951
Grouper	45,805	188,864
Pacific mackerel	40,859	790,610
Rock crab	33,247	266,011
White croaker	31,017	361,905
Pacific pompano	29,403	164,850
Anchovy	24,978	2,557,745
California yellowtail	24,769	199,751
Giant sea bass	23,959	125,684
California halibut	22,365	64,040
Albacore	17,636	78,416
Flyingfish	14,584	97,170
California barracuda	11,667	50,927
Shark	9,130	69,006
Smelt	5,611	135,870
Sardine	3,933	35,344
Halfmoon	3,061	12,910
Blacksmith	2,712	106,805
Sculpin	2,629	7,258
Opaleye	2,259	11,021
Perch	2,196	9,349
Skipjack tuna	1,260	9,445
All other species	1,667	12,244
Port totals	$1,846,544	20,031,392

TABLE 20—Continued

Value of Landings and Shipments by Port, Los Angeles Area, 1969

	Value	Pounds
Wilmington		
Landings:		
Jack mackerel	$186,602	4,928,371
Abalone	56,894	175,394
Pacific bonito	46,831	1,002,811
Pacific mackerel	6,086	117,766
Anchovy	5,891	603,270
Blacksmith	3,156	124,296
Spiny lobster	3,043	2,681
All other species	784	24,746
Port totals	$309,287	6,979,335
Newport Beach		
Landings:		
Swordfish	$134,554	263,401
Spiny lobster	23,793	20,961
California halibut	2,416	6,919
White seabass	1,240	3,917
All other species	1,539	46,901
Port totals	$163,542	342,099
Long Beach		
Landings:		
Spiny Lobster	$41,389	36,462
Rockfish	11,388	59,219
Perch	2,907	12,346
Abalone	1,555	4,662
Anchovy	1,437	147,111
Rock crab	1,389	11,113
All other species	2,407	11,854
Port totals	$62,472	282,767
Redondo Beach		
Landings:		
Spiny lobster	$14,657	12,912
Rock crab	2,822	22,577
All other species	191	1,065
Port totals	$17,670	36,554
Santa Monica		
Landings:		
Spiny lobster	$3,143	2,769
White seabass	2,347	7,417
Swordfish	1,280	2,505
All other species	880	6,853
Port totals	$7,650	19,544
All other ports		
Landings:		
Spiny lobster	$4,067	3,584
Abalone	2,741	8,316
Swordfish	1,284	2,513
All other species	1,641	10,521
Totals	$9,733	24,934
LOS ANGELES AREA TOTALS	**$60,404,003**	**489,348,897**

* Beginning in 1965 only tuna shipments are recorded.

TABLE 21

Value of Landings and Shipments by Port, San Diego Area, 1969

	Value	Pounds
San Diego		
Landings:		
Yellowfin tuna	$7,107,737	43,963,574
Skipjack tuna	1,592,890	11,672,863
Bluefin tuna	620,858	4,058,562
Albacore	318,254	1,416,058
Abalone	148,423	514,418
Swordfish	95,034	204,755
Pacific bonito	85,951	1,731,915
Spiny lobster	85,569	71,068
White seabass	58,561	180,193
Rockfish	30,617	193,381
Sculpin	29,458	104,726
Shark	20,379	135,679
Grouper	16,562	66,247
California halibut	11,267	33,004
Bigeye tuna	5,659	35,831
Giant sea bass	5,405	27,169
Sardine	4,817	22,430
California barracuda	4,287	19,627
Perch	3,725	21,809
California yellowtail	3,431	31,754
Halfmoon	2,572	12,014
Opaleye	1,045	4,839
All other species	3,723	34,668
Total landings	$10,256,224	64,556,584
Shipments:*		
Albacore	$1,227,513	4,528,720
Yellowfin tuna	212,222	980,670
Total shipments	$1,439,735	5,509,390
Port totals	$11,695,959	70,065,974
Oceanside		
Landings:		
Rockfish	$4,549	28,542
Shark	4,161	27,885
Spiny lobster	2,073	1,722
California halibut	1,411	4,134
All other species	2,118	17,986
Port totals	$14,312	80,269
Cardiff		
Landings:		
Spiny lobster	$12,169	10,107
Port totals	$12,169	10,107
SAN DIEGO AREA TOTALS	$11,722,440	70,156,350

* Beginning in 1965 only tuna shipments are recorded.

TABLE 22

Statewide Commercial Partyboat Catch by Species
(Not including anchored barges)
1960–1969 *

Species	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Barracuda, California	755,408	391,884	335,507	483,699	303,070	443,304	892,697	470,480	372,246	358,518
Bass, kelp and sand	478,656	613,604	789,149	1,219,344	1,103,394	1,230,313	1,278,939	1,003,914	1,317,963	1,246,175
Bonito, Pacific	1,199,919	849,426	798,725	775,719	1,298,804	806,322	644,415	349,952	1,102,936	1,130,241
Cabezon	2,516	2,639	4,538	9,726	6,491	7,575	10,293	5,419	4,349	4,583
Halibut, California	48,310	108,011	118,966	125,669	141,465	118,213	88,726	63,582	54,663	27,634
Lingcod	28,232	23,466	25,399	27,513	25,263	33,260	44,676	43,559	42,449	32,693
Mackerel, jack	8,537	28,891	9,029	9,342	6,577	25,619	19,027	16,236	13,588	11,272
Mackerel, Pacific	79,370	113,988	116,738	146,560	101,219	151,896	205,090	108,366	78,933	120,036
Rockfish	1,015,673	898,641	956,438	962,659	966,801	1,347,430	1,688,718	1,894,057	2,102,859	1,978,981
Salmon	37,941	42,965	87,612	72,457	92,021	51,677	70,151	84,946	127,584	111,389
Sculpin	15,111	26,672	33,314	53,896	73,844	71,888	69,851	63,280	59,863	63,011
Seabass, white	15,697	14,082	14,564	19,800	14,901	9,775	3,972	3,385	4,138	4,056
Sheephead, California	11,541	15,210	13,488	18,443	26,822	41,651	52,967	42,676	33,075	49,626
Tuna, albacore	76,075	184,891	229,314	158,372	112,358	99,771	74,680	96,497	129,710	48,887
Tuna, bluefin	97	2,268	2,453	737	693	92	1,998	3,166	1,231	1,470
Whitefish, ocean	5,850	6,647	6,157	6,231	6,949	13,810	15,587	18,184	22,155	36,474
Yellowtail, California	254,969	42,367	21,826	45,705	39,104	18,367	80,163	31,392	58,049	79,202
All others	56,132	87,981	92,776	142,630	114,400	163,595	166,470	145,073	205,410	421,327
Total number of fish	**4,090,034**	**3,453,633**	**3,655,993**	**4,278,502**	**4,434,176**	**4,634,558**	**5,408,420**	**4,444,164**	**5,731,201**	**5,725,575**
Number of angler days†	516,255	495,805	----	----	----	----	----	----	----	----
Number of anglers	637,498	593,916	595,866	643,155	695,445	688,103	857,000	780,102	849,654	802,811

* See Fish Bulletin No. 121 for historical records 1936–1961.
† Not available after 1961.

TABLE 23
Inshore Bait Landings by Area
Pounds and Value
1969

Species	Sacramento	San Francisco and Monterey	Los Angeles	San Diego	Statewide*
Clam					
Freshwater	653,371	17,785	----	----	671,156
	$57,529	$1,604	----	----	$59,133
Jackknife	----	----	34,697	32,467	67,164
	----	----	$21,232	$19,067	$40,299
Purple	----	----	2,839	10,114	12,953
	----	----	$1,423	$5,034	$6,457
Unclassified	----	262	255	----	517
	----	$64	$166	----	$230
Crab					
Sand	----	----	3,952	40	4,019
	----	----	$24,683	$98	$24,793
Shore	----	----	----	----	5
	----	----	----	----	$72
Crayfish	----	----	----	----	47
	----	----	----	----	$228
Mudsucker, longjaw	----	4,118	149	11	4,278
	----	$523	$154	$12	$689
Mussell (bay and rock)	----	477	92,981	8,210	101,668
	----	$19	$12,119	$1,027	$13,165
Perch, shiner	----	----	----	----	93
	----	----	----	----	$150
Sculpin, staghorn	924	235	----	----	1,237
	$3,006	$427	----	----	$3,685
Shrimp					
Bay	59,011	2,029	----	----	61,040
	$70,884	$2,675	----	----	$73,559
Ghost	----	----	6,694	2,145	8,839
	----	----	$27,850	$4,607	$32,457
Red	----	----	4,568	----	4,568
	----	----	$7,230	----	$7,230
Total	713,306	24,906	146,135	52,987	937,584
	$131,419	$5,312	$94,857	$29,845	$262,147

* Some figures are reported statewide only to avoid revealing the business of an individual in an area.

TABLE 24
Recorded Catch of Live Bait for Saltwater Sportfishing, 1965–1969

Species	Thousands of pounds*				
	1965	1966	1967	1968	1969
Anchovy	12,296	13,382	10,774	14,353	10,627
Mackerel, jack	----	25	----	158	103
Mackerel, Pacific	----	----	----	----	8
Sardine, adult	66	54	1	57	34
Sardine, juvenile	2	T	T	----	----
Squid	----	T	----	23	9
Miscellaneous†	82	84	22	57	----
Total pounds	12,446	13,545	10,797	14,648	10,781
Number of vessels‡	24	18	16	19	10

* Weights are estimated from voluntary records. They should be regarded as minimal because some fishermen do not supply catch information.
T Less than 500 pounds.
† Consists primarily of queenfish and white croaker.
‡ The number of live bait fishing vessels for which landings were reported. These numbers differ slightly from those in previous catch bulletins, since the earlier landing records, as submitted, sometimes included the catch of more than one boat.

APPENDIX A

TABLE 1

California Commercial Troll Salmon Landings by Port-Area, Month and Species, in Pounds[1] and Numbers—1969

	April		May		June		July		August		September		Season	
	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers
Crescent City														
King	4,634	565	45,730	6,066	69,218	8,414	34,797	4,859	23,050	2,430	3,039	399	180,468	22,733
Silver	11	1	1,297	259	178,403	33,982	61,720	9,495	2,680	345	77	10	244,188	44,092
Pink	0	0	19	8	3,083	816	3,570	793	0	0	0	0	6,672	1,617
Eureka														
King	94,645	12,189	396,954	52,479	139,441	18,631	244,152	26,064	128,356	17,663	8,590	1,074	1,012,138	128,100
Silver	172	31	3,634	808	226,073	37,679	24,859	3,013	1,658	255	0	0	256,396	41,786
Pink	10	5	43	21	292	146	1,904	408	0	0	0	0	2,249	580
Fort Bragg														
King	50,268	6,013	147,683	18,031	137,883	15,312	444,338	49,471	172,438	16,710	156,226	14,691	1,108,836	120,228
Silver	73	16	2,671	475	107,575	16,136	373,684	51,788	27,073	3,587	29,217	3,437	540,293	75,439
Pink	0	0	27	14	3,172	793	5,131	941	0	0	0	0	8,330	1,748
San Francisco														
King	155,291	22,459	373,804	42,069	432,873	47,164	415,336	47,752	86,918	8,931	93,780	8,374	1,558,002	176,749
Silver	0	0	7,652	1,275	82,548	15,409	67,321	9,607	195	28	2,538	299	160,254	26,618
Pink	0	0	25	6	2,584	701	1,162	218	0	0	0	0	3,771	925
Monterey														
King	247,015	27,868	322,647	35,669	171,192	16,193	164,402	13,404	112,805	9,124	17,817	1,355	1,035,878	103,613
Silver	236	51	12,289	2,161	18,017	2,834	2,605	307	219	26	32	4	33,398	5,383
Pink	0	0	0	0	14	4	19	5	0	0	0	0	33	9
Statewide														
King	551,853	69,094	1,286,818	154,314	950,607	105,714	1,303,025	141,550	523,567	54,858	279,452	25,893	4,895,322	551,423
Silver	492	99	27,543	4,978	612,616	106,040	530,189	74,210	31,825	4,241	31,864	3,750	1,234,529	193,318
Pink	10	5	114	49	9,145	2,460	11,786	2,365	0	0	0	0	21,055	4,879

[1] Dressed, head on

APPENDIX A—Continued

TABLE II

California Ocean Recreational Salmon Landings and Success[1] by Fishery, Port, Month and Species, in Numbers of Fish—1969

	February			March			April			May			June			July		
	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day
Crescent City																		
Partyboat	0	0	--	0	0	--	0	0	--	0	0	--	0	0	--	141	18	0.6
Skiff	0	0	--	0	0	--	0	0	--	0	0	--	68	112	0.5	2,349	1,395	0.9
Eureka																		
Partyboat	0	0	--	0	0	--	5	5	[a]	20	51	0.2	131	332	0.6	623	701	0.7
Skiff	0	0	--	0	0	--	0	0	--	26	61	0.2	1,317	1,467	0.6	8,512	4,756	0.7
Fort Bragg																		
Partyboat	0	0	--	0	0	--	6	6	[a]	0	159	1.5	446	260	0.6	800	1,445	0.8
Skiff	0	0	--	0	0	--	0	0	--	0	0	--	140	186	0.4	1,204	2,366	0.6
San Francisco																		
Partyboat	8,292	0	2.5	13,848	0	1.7	7,106	0	1.5	5,368	2,435	1.5	9,998	4,244	1.4	11,783	673	1.3
Skiff	1,103	0	1.8	3,260	0	1.2	1,046	0	0.5	1,574	544	0.8	2,455	851	1.1	3,078	225	0.8
Monterey																		
Partyboat	178	0	[b]	554	0	[b]	615	51	[b]	206	74	[b]	148	48	[b]	127	12	[b]
Skiff	464	0	0.9	2,664	0	0.4	1,876	148	0.4	1,245	447	0.3	1,593	515	0.3	2,047	198	0.3
Statewide																		
Partyboat	8,470	0	2.5	14,402	0	1.7	7,732	62	1.5	5,594	2,719	1.5	10,723	4,884	1.3	13,474	2,849	1.2
Skiff	1,627	0	1.5	5,924	0	0.8	2,922	148	0.4	2,845	1,052	0.6	5,573	3,131	0.7	17,190	8,940	0.7

TABLE II—Continued

California Ocean Recreational Salmon Landings and Success[1] by Fishery, Port, Month and Species, in Numbers of Fish—1969

	August			September			October			November			December			Season		
	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day
Crescent City																		
Partyboat	2	1	0.3	0	0	--	0	0	--	0	0	--	0	0	--	143	19	0.6
Skiff	352	675	0.4	4	9	0.1	0	0	--	0	0	--	0	0	--	2,773	2,191	0.7
Eureka																		
Partyboat	878	358	0.4	37	63	0.7	14	0	[a]	0	0	--	0	0	--	1,708	1,510	0.6
Skiff	8,838	1,995	0.7	237	105	0.3	0	0	--	0	0	--	0	0	--	18,930	8,384	0.7
Fort Bragg																		
Partyboat	596	152	0.4	297	151	0.6	6	0	[a]	1	0	[a]	0	0	--	2,152	2,173	0.6
Skiff	417	439	0.3	47	177	0.3	0	0	--	0	0	--	0	0	--	1,808	3,168	0.5
San Francisco																		
Partyboat	12,447	164	1.4	10,288	10	1.1	10,468	0	1.2	4,188	0	1.1	8	0	[a]	93,794	7,526	1.5
Skiff	2,432	64	0.8	2,470	9	0.8	1,363	0	0.7	882	0	0.5	0	0	--	19,723	1,693	0.8
Monterey																		
Partyboat	188	4	[b]	32	0	[b]	54	0	[b]	73	0	[b]	0	0	--	2,175	189	[b]
Skiff	1,595	33	0.3	484	0	0.2	324	0	[a]	270	0	[a]	0	0	--	12,562	1,341	0.4
Statewide																		
Partyboat	14,111	679	1.3	10,654	224	1.1	10,542	0	1.2	4,262	0	1.1	8	0	[a]	99,972	11,417	1.4
Skiff	13,634	3,206	0.6	3,242	300	0.6	1,687	0	0.7	1,152	0	0.5	0	0	--	55,796	16,777	0.7

[1] Salmon per angler-day, species combined. [a] No sampling. [b] Data not comparable to that of other ports or months.

△81520—800 2-71 3,500

printed in CALIFORNIA OFFICE OF STATE PRINTING